



LIBRARY OF CONGRESS.

Class. QK118

Shelf .D92

Copyright No.

UNITED STATES OF AMERICA.



mong the Trees:

#698

A JOURNAL

OF

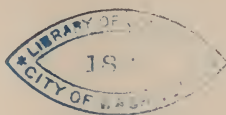
WALKS IN THE WOODS, AND FLOWER-HUNTING
THROUGH FIELD AND BY BROOK.

BY

MARY LORIMER.

M. O. B. Dunning

WITH ILLUSTRATIONS FROM DRAWINGS AFTER NATURE.



NEW YORK:

PUBLISHED BY HURD AND HOUGHTON.

Cambridge: Riverside Press.

1869.

Entered according to Act of Congress, in the year 1869, by
HURD AND HOUGHTON,
in the Clerk's Office of the District Court for the Southern District of New York.

RIVERSIDE, CAMBRIDGE:
STEREOTYPED AND PRINTED BY
H. O. HOUGHTON AND COMPANY.

GR 118
.1192

THE MONTHLY CALENDAR OF FLOWERS.

	PAGE
FLOWERS OF APRIL	50
FLOWERS OF MAY	65
FLOWERS OF JUNE	83
FLOWERS OF JULY	99
FLOWERS OF AUGUST	116
FLOWERS OF SEPTEMBER	125

LIST OF ILLUSTRATIONS.

	PAGE
HEPATICA-TRILOBA: LIVER-LEAF	4
THE DRIPPING ROCKS	9
OXALIS-VIOLACEA: VIOLET WOOD-SORREL	32
A WATERFALL	43
ORCHIS-SPECTABILE: SPRING ORCHIS	47
EPIGEA-REPENS: MAY-FLOWER	51
TRIENTALIS-AMERICANA: STAR-FLOWER	53
A KINGFISHER	64
AZALEA-NUDIFLORA: HONEYSUCKLE	75
MONOTROPA-UNIFLORA: INDIAN PIPE	77
NEPENTHES-DISTILLATORIA: PITCHER-PLANT	89
A WOODY RECESS	98
OAKS	101
GHOST-FLOWER	108
SAGITTARIA-VARIABILIS: ARROW-HEAD	112
WALKING-FERN	119
A SEA VIEW	124
PARNASSIA-CAROLINIANA: FLOWER OF PARNASSUS	128
FOUR-LEAVED CLOVER	130
FOREST LEAVES	132
FERNS	139
FERNS	141
LYGODIUM-PALMATUM: CLIMBING-FERNS	149
THE HILLS	153

AMONG THE TREES.

FEBRUARY 10.

YES, my dear Rose, "Among the Trees" is the name I have given for the present to our country home, a little picture of a place, framed by romantic hills. A very appropriate name, you would allow, for before us and around us and behind the house to the mountain top, stretch the grand and wonderful trees. What the real name will be, I do not yet know. Father finds one quite remarkable in Latin, and another equally so in French; the first expressing something which actually happened to this place years ago, and the other very prettily enshrining the name of a family who once owned it. But we think we shall escape these. Aunt Emily says she does not care how grand the names may be they give to city places, but here on these green slopes, watered by mountain streams and made beautiful by forest trees, some good old English word seems best.

I am rejoiced that we live at last where there are mountains. Mountains or the sea, Helen thinks, should be in sight from the windows of all country houses. Mountains are all around us, and a walk to the summit behind the house gives us a view of the distant ocean.

I see that there will be much to write you about, if we live in the country, for we are such genuine country lovers that we shall find objects of interest in things that

might seem trifling or unworthy to less devoted hearts. Not a flower or a fern or a mossy stone, not a leaf that will wave on these countless trees, not even a blade of grass will seem trifling or unworthy to us; neither will they to you, I am sure.

The out-of-doors here seems interminable, and we are continually tempted to explore in all directions, and I shall try and make you familiar with all that grows dear to us. It is now February, and the spring will soon be opening fresh and fair, and I know that then I shall want to write to you about bluebirds and robins, and dancing brooks and opening flowers, and all the novelties of living among the hills. There will be plenty of spring-work, as the farmers say, and I must improve the little time before that to tell you of our winter woods and winter experiences. I wish I had written to you regularly the few months that we have been here, and thus kept you along with us in our daily round of duties, pleasures, and pursuits, but we were a long time getting settled, and I did not think of it.

Our life here is not very striking, it is true, and to some of our fashionable friends would probably seem tedious and stupid, but we do not find it so. The days are not long enough for all we find to do, and to enjoy, and we know not what it is to wish time away.

I shall write you all that I think will interest you, and that will be about all that interests us; and I shall not confine myself to any formalities of letter writing, but write whenever I feel like it, and about anything that is in the ascendant at the time.

We came here, as you know, in mid-winter, a dreary time, one would think, to begin living in the country; but the weather was mild and the walks so pleasant that we

went into the woods almost every day. Many a day in December, when the city dweller supposes the country a frozen desert, dead and buried beneath a shroud of snow, we have gone out after breakfast and found enough to interest and keep us out all the forenoon. It was seldom cold after we reached the wood-paths, for the wind did not penetrate the forest of tree-trunks. There were always sheltered dells upon the southern slopes, where the frost put his cold fingers only in the way of graceful adornment; the beauty and variety of the winter mosses were a perpetual delight; and the hardy winter birds would follow our steps, fluttering from tree to tree, and seemingly extending to us the hospitalities of their peculiar domain; and we who had supposed birds mere "summer friends," were rejoiced to find that some could be depended upon at all seasons. We always found interesting things during these strolls upon the hills, and here I must tell you of a pretty little flower which gained our earliest affections in this winter solitude. It is one of the spring's first welcomers, blossoming early in April, and you may think it has no place in winter woods, but it has, as you will see. We often found, under sheltering covers of fallen leaves, the folded up plants waiting for the spring; and floating out on long stems, over mosses and amongst the rocks, we noticed a great many pretty three-lobed leaves, which with evergreen endurance braved all the blasts. Some of them were rusty and weather-beaten, but in sheltered spots they were often of a fine deep green, and tinged with crimson and purple. These leaves were new to us, and we traced them to their source; and there just beneath the soil, we found delicate flower-buds wrapped in nature's soft wrappings, but fully formed and "biding their time."

We thought we would give them the benefit of sunshine within doors, and we took up with great care some of



Hepatica-triloba.

these bunches of buds, not disturbing the roots. We carried them home, placed them in a flower-pot in a sunny window, and to our great satisfaction, in a few

days they began to grow. The buds shot up on downy, purplish stems, several inches high, and in about three weeks after we brought them home, on New Year's morning, behold several of these buds opened and displayed to our delighted eyes a new and charming flower, the pretty purple blossoms of the Hepatica. We were, of course, much pleased with the new flower, blooming in January when its custom is to wait till April, and we duly appreciated the delightful sentiment of the thing, the friendly hurrying up of these fair creations to wish us strangers a "Happy New Year."

Now we study about all the flowers we find and examine them botanically, though you, city dweller that you are, cannot do this, because you cannot get any wild flowers; ah, no, you may hunt from one end to the other of Chestnut, Walnut, Spruce, or Pine Streets, but under none of these pretended trees will you find one sweet little wild-wood blossom.

But I know how you love flowers, and how you will persevere in studying about them, so you must take Gray's Botany, and read on page sixth the botanical description of "*Hepatica-triloba*, liver-leaf, belonging to the *Ranunculaceæ* or Crowfoot Family," described as having heart-shaped, three-lobed leaves, persistent through the winter; flowering soon after the snow leaves the ground; flowers blue, purple, and white.

You must read with the greatest care and patience the description given in the Botany of any plant you may be wishing to understand about; no matter if it seems hard and stupid, it must be *understood*. The minuteness of botanical description is wonderful, and this is necessary because the distinction between different species of flowers often depends upon a very slight thing,

some little bract or nectary that would quite escape the eye of a casual beholder.

And you must become familiar with the Glossary, where different terms are explained, and find out and *remember* the difference between leaflets, sepals and petals, and pedicels and petioles, stamens and anthers, styles and stigmas, and a great many more terms. You have no idea what a charm this knowledge will give to all your botanical researches hereafter. I wish the learned botanists were not so afraid of praising the beauty of the flowers they describe. I do not see how they can help saying how lovely they are, but some of them seem to think the drier the better.

If I wrote a Botany I would have a pretty description of every flower, and nice names, not hard words that nobody can spell or pronounce, and I would have beautifully drawn and colored pictures of the flowers, with the green leaves and the delicate little brown roots, just as they grow. I think the girls would like my book better than those they now have to study.

Well, this is our first flower, blooming January first. I fear it will be several months before we have another to register. O no, there is another even earlier than this, though I came near forgetting it. One day in December, when we were out exploring, Helen, who seems always the first to spy out novelties, called out to us to come and see a tree covered with little yellow flowers sitting down on all the stems. And sure enough, we found this tree covered with quantities of little yellow blossoms growing upon the bare branches. They were not very handsome, but interesting at that time of year, and delightful to us novices in rural life. Not a leaf on the tree, only this profusion of little flowers and some dried up seed-vessels of the last year.

We thought at once it must be the witch-hazel, as only a day or two before Isabella had read aloud these lines, —

“ That strange awakener at cold winter’s verge,
The low witch-hazel, shows its yellow stars
Curled thick along its boughs.”

We took a branch home, and Father put one of the seed-vessels in his pocket, and the next day in the city he showed it to a botanical friend of his, who, as soon as he glanced at it, said, “ That is the *Hamamelis-Virginica* or witch-hazel.” How do you suppose he could tell by that old, dried seed-vessel? So here are two flowers by January first.

You must have a book in which to register the names of the flowers we tell you of. This will make you familiar with the names at least, and as we shall study botany together when you are here another year, it will be well for you to have some preparation or I fear you will never be able to catch us. You will see by the lists we shall send you how to prepare your book. You will observe the number of divisions required, and the order of arrangement, Class, Order, Genus, Species, Common Name.

In putting down the *botanical name*, which comprises the *genus* and *species*, you will of course begin the *generic* name with a capital letter, but the *specific* name should always begin with a small letter, and should be divided from the generic name by a hyphen, thus, —

Hepatica-triloba,
Arethusa-bulbosa, etc.;

unless, as frequently happens, the *species* is named for

a place or a person, then the species also must begin with a capital letter, as

Cornus-Canadensis,
Viola-Selkirkii, etc.

Now do you think this is too much trouble to take for these "darlings of the forest?" I hope not, for in no other way can you become understandingly and forever at home with these fair friends.

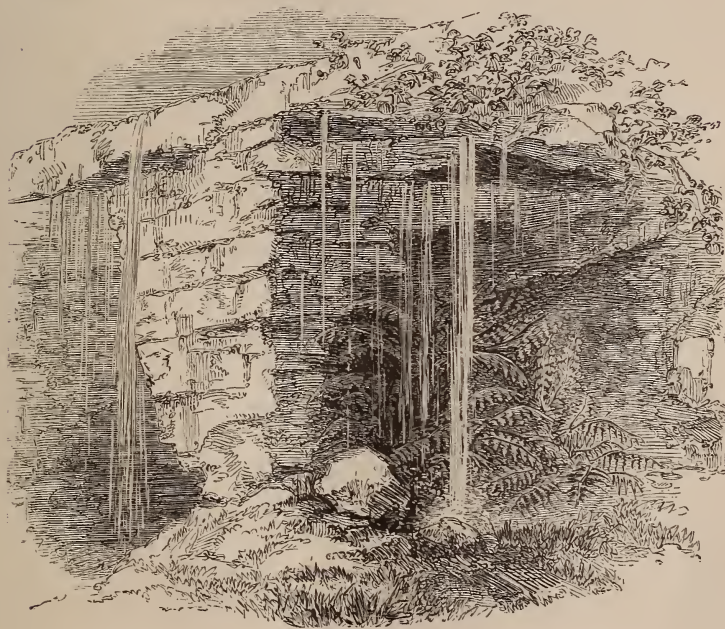
In one of our botanical books it says that the *Hepatica* with *round* lobes to the leaves grows upon the southern slopes of hills, and the *acuti-lobed* upon the northern slopes, and it is certain that the many we have found are round-lobed, and our hill-side slopes southward. When the spring advances, we intend to extend our search over the mountains and down the northern slope, and see if there is really any difference.

FEBRUARY 14.

I must tell you now of a winter water-plant, which we discovered in a most romantic little nook.

As you go up the hills a short distance from the house, a path leads down a ravine towards a mountain stream. Taking this path, you find yourself on the edge of a steep bank, and on three sides are high rocks crowned with trees. Looking over the bank, you see below a pretty little lake, its basin scooped out at the bottom of these high rocks. This fairy lake is formed by water which, coming from the hills, finds its way in many little trickling streams through the crevices of these surrounding cliffs, and these little streams keep drip, drip, dripping all the time. Helen has named this the Green Lake, because in the depth of winter, when we first discovered it,

it was as green as the freshest green grass of summer. Helen ventures into all sorts of places where the rest of us are often afraid to go, and she is frequently rewarded by finding some woodland treasure. At this time she clambered down the steep bank almost to the edge of the water to find out what this greenness meant, and putting out her cane (for we all carry canes or sticks on our walks) she touched the green surface, and lo, it was hard as marble, frozen entirely over. Father said he supposed the water was filled with some delicate water-plant. "O," said I, "then these delicate water-plants must be all killed by this hard freezing." After a few



days, however, during which there had been a soft rain, Helen and I went again to the Green Lake, and the water, no longer frozen, was greener than ever, and putting in our sticks, we drew out long streamers of the delicate plant, not in the least injured by the freezing. It had very small bright green leaves, and the plants grew so thick and fine as to cover the water like an emerald carpet. The effect was charming, and I think when it was frozen, the ice must have looked lovely, veined throughout with these leaves and streaming vines. This Green Lake is a favorite resort of ours. It is not far from the house and affords a good field for experimenting in various ways. Helen's resources are unfailing, and these wild brooks and mossy stones are delightful implements provided to our hands. We have spent I cannot tell you how much time in constructing a waterfall as a tributary to the Green Lake. One of these streams formed by the trickling water through the cliffs, encountered, on its passage to the lake below, a large rock, and in a very quiet way slipped *under* it, disappearing forever, and entering the basin by some subterranean passage. We thought it would be a great improvement if this graceful streamlet could be induced to tumble over, instead of stealing under, this rough rock, and after hard labor we contrived to fill up the entrance to the underground channel, and thus our sparkling little friend was all ashore. We had arranged the pathway we wished it to take, making it attractive with glistening pebbles and mossy stones, and by placing barriers to prevent its running away at certain points, we at length succeeded in enticing this wild little mountain wanderer to try our improvement. The trial was quite satisfactory, and it has ever since danced gayly along its sunny pathway,

tumbling with a very respectable splash over the rock, and from that down the steep bank into the lake below.

All winter too, through the cracks in the high rocks, we could see the pure mountain water trickling down over mosses green as emeralds, often covered with a coating of ice and long icicles hanging amongst them, but they never losing their verdure. Ice-plants they truly were. We picked some of this moss from the cold rocks all sparkling with freezing water. We found that it grew in the slenderest, frailest threads, a few inches long, of velvety softness and most brilliant green. We tried to make it live in the house in a nice warm place, under glass and amidst graceful tropical ferns. It looked fresh and lovely for a day or two, and was as beautiful, I am sure, as any tropical moss can be, but after a little while it began to turn brown, and lost all its beauty. I suppose it longed for the cold, oozing mountain drops, the long bright icicles, and its chosen home in the fairy little hollows of the old gray rocks, for all our care could not make it flourish in the house. It was made to adorn and deck those grim and savage ledges, to glitter under icy water, and give a glow and grace to the dreariest wintry days. But we found many beautiful mosses in the woods that did flourish very well in the house. Of these I must tell you in my next; they were steadfast friends all through the winter and are worthy of an affectionate tribute.

FEBRUARY 20.

These woodland mosses and lichens are very unlike those we found growing in the crevices of the wet rocks, being as tough and enduring as the others are delicate and frail. Some grew upon the ground like little ever-

green trees, trim, compact, and regular; others like graceful little ferns; and a favorite kind we could strip from the trunks of old trees in pieces as large as a dinner plate. This was a very thin kind of moss, of a dark green ground, and dotted all over with brighter green dots, and we called it the *carpet* moss. Then we found perfectly round balls, with a soft covering, and standing thickly upon them short stems with the roundest green heads. These we called *pincushion* mosses, and you could not believe, unless you saw them, how much they look like plump little cushions stuck full of green pins. Another beautiful moss was more rare and grew upon the decaying stumps of trees. This was a beautiful metallic green below, and tipped with scarlet. It was delightful to see this under the microscope; the green stalk, which to the naked eye seemed thickly set with shining dots, became a perfect forest of transparent branches with glittering emerald tips, the whole finished off with a brilliant scarlet crown. Then came the *soldier-moss*, where the dear little red caps fit on the heads of the slender stems, and can so prettily be drawn off, to the delight of children; and the *fairy-cups*, the pale green lichens, little cups and vases, some of them *three stories high*, — that is, a little saucer below, from which springs a slender stem, expanding into a little vase, out of the border of which come three or four of the tiniest cups arranged along the edge, all perfectly formed and ready for an elfin festival.

The beautiful freaks of nature in these wild solitudes are worth investigating I assure you. The graceful shapes, the soft, harmonious colors, adorning these almost unseen creations, would astonish those who have never given them a look or a thought. Upon the limbs

of some old apple-trees lying upon the side of a hill, we found a perfect flower-garden of its kind, fair forms and soft tinting, and an elaborate and fanciful crimping and scalloping and ornamenting of edges, quite bewildering to the observer. One would be disposed to pass by a collection of unsightly old apple-tree boughs, with no notice except to wonder why they were permitted to cumber the ground.

But these were covered with beauty. We would find, within a space of five or six inches, enough to excite our wondering delight, not only for the moment, but for the winter, as these retain their beauty for months.

In their arrangement there would generally be, first, a flat gray groundwork running around the limb, a sort of little tray, upon which would be clustered the varying forms I spoke of. Sometimes simple leaf-shapes, small and smooth, then leaf-shapes with waved and fluted edges, soft gray upon the upper side, pearly white upon the under, and the "silver linings" turning out with every curving edge. Amongst them would be found fair bell-shaped and wheel-shaped forms, little tubes swelling into perfect buds, buds expanding into what so much resembled flowers that the resemblance would be recognized by any one who would look at them. The quiet gray, which was the prevailing color, was often enlivened by gay touches of orange, purple, rose-color, and ashes of roses. Who would think that all this beauty of form and coloring could be found in mid-winter on such unpromising specimens, or that this retired spot in the country could be anything but dreary at the same season; but there are *compensations* everywhere, if we will but search them out. We have arranged through the winter vases filled with the dried seed-ves-

sels of plants which we find in the woods and fields. You would be amazed at the variety and beauty of these. I cannot mention all, for many we do not know. By *we* I mean Aunt Emily, or Father, or any one who has some knowledge of nature. Isabella, Helen, and I do not know much of anything yet, but we *shall* know, and we have learned the names of some of these already, and can distinguish the bloomy purple of the sumac; the rich browns and maroons of hemlock cones and larches; the dear acorn cups; the peculiar involucre of the hazel-nut; the stiff stems and quaint blossoms of the witch-hazel; the folded carpels of the tulip-tree; the spiny balls of the liquidambar; the silvery shine of the everlasting, and the elegant berries of the wax-work; and mingled with these and overtopping them, slender stems with feathery tips of airy lightness. The effect is beautiful, and they never fade; and how wonderful it is that God should "clothe the grass of the field," even in its decay and death, with such varied and enduring beauty. "You are enthusiasts," said a lady who was visiting us: "how can you find anything to interest you out-of-doors in the country, in winter?" I could not but think that if she would cultivate a little more enthusiasm, we should not so often hear the weary yawn, and the "O dear, what shall I do with myself?"

FEBRUARY 21.

We have found the greatest pleasure all winter in a glass case which we have for flowers. Ours is of domestic manufacture, and not as handsome as those made in cities, of costly materials; but it looks very well indeed, and is a treasure in our country home. Father had a good-sized box made of black walnut, and lined with

zinc, and the glass cover he made himself when at home in the evenings. I thought this part very difficult, but he found it a pleasant amusement. He brought home a glazier's diamond to cut the large plates of glass the proper size, then, bringing the edges together, and *keeping* them so with some help from his several assistants, he pasted strips of strong buff paper over the seams on the outside. After these were dry, he turned the cover carefully over, and pasted the inside seams also. This has answered every purpose; it has been used for months, and strange as it may seem, the paper has never peeled off, though there is so much moisture within. Around the upper edge of the box is a narrow shelf with a groove in it, upon which the glass cover rests, and from which it can be lifted at pleasure.

John covered the bottom of the box with pieces of charcoal, then filled it with nicely prepared earth, and it was ready for experiments. A botanical friend in the city sent out a basket of treasures from a greenhouse, and we found great satisfaction in giving these a home in our new case. In the first place, there was an air-plant, such a queer looking thing, fastened upon a piece of wood, with the roots standing up in all directions, to draw nourishment from the air, for with the earth they have nothing to do. This plant has no beauty at present, though it is said to bear a splendid flower, but even if it never blossoms, it has an interest for us. It whispers of those wondrous tropical woods always so delightful to read about; those tangled labyrinths of bloom, where the sunshine finds its way through musky groves and flowering trees, where the hot and humid atmosphere nourishes in gorgeous splendor those brilliant Orchids whose blossoms take the aspect of airy insects,

and insects glitter like flying blossoms, and bright birds take the tints of the rainbow. Next to the air-plant came a fair tropical fern, tall and stately; then two or three more ferns, fine-leaved and delicate, among them that most graceful and exquisite of ferns, the tropical maiden-hair,— the small, beautiful green leaves, strung along upon a slight stem like a thread of amber or a golden hair from the brow of some fair maid. Then came a tall, stiff plant without one trace of grace or beauty, but it is accepted and treated with all respect, for who knows what may come of it? Then two or three unknown plants of elegant habits of growth and highly ornamented; then a quaint-looking little plant, singularly marked with pure white lines and spots upon a most vivid green ground, and bound around the edge with a silvery white binding. We found room for all these foreign celebrities, but we did not wholly slight the favorites upon our own soil. We went to the woods and found the nice carpet moss to cover the ground, and I begged Aunt Emily to find a place for a dear little pincushion-moss, about the size of one of our old-fashioned china tea-cups; perfectly formed it was and stuck brimful of *pins*. We also selected two or three charming little ferns, genteel enough to be introduced into the most aristocratic society.

We put down the soft emerald carpet, then upon one side we made an excavation, stoned it all around with prettily colored shells and stones, fitted into the bottom a small glass cup which did not show, filled this with water and placed at the edges the graceful, feathery ferns, to droop above the tiny lake. Helen found a slender twig overgrown with those wonderful lichens with orange and scarlet tips, and this, thrown across the lake.

was a rustic bridge. A stone beautiful with the freshest mossy covering, became a bold headland by the water's side, and one or two pearly, buff-colored shells, thin as a finger nail and as transparent, floated like fairy boats upon the fairy tide. The pincushion was placed beneath the delicate maiden-hair, the air-plant honorably stationed, and all the others arranged in the most desirable positions.

The plants were then generously watered, the cover placed over them and there they are at this moment, fresh and dewy and unfading; and if the fairies do not come every moonlight night to swing on those ferns, dance upon that bridge, and sail in those amber skiffs, it is their own loss. These plants have been there more than two months and are fresh as ever. No storm disturbs their serene lives, no glare of sunshine dries up the dewy sparkles on leaf and tip. In tranquil beauty they defy all the dust and turmoil of life, secure in their quiet paradise, and gifted apparently with the freshness of immortal youth.

If the cases are perfectly air-tight, the plants require watering but once or twice a year, perhaps not as often; but ours is not quite air-tight, and our plants get a sprinkling once in three or four weeks.

Many wonder how these plants can thrive, shut in from the fresh air usually considered so essential to the prosperity of plants. I do not pretend to understand it, but will quote for your edification a sentence upon the subject which Isabella read the other day from some scientific essay. "The deterioration of the atmosphere is daily counteracted by an opposite process of purification, so that amidst the vicissitudes of perpetual change, the air is maintained in a state of nearly uniform purity

and serves over and over again the purposes of vegetation." The writer then proves his theory by nitrogens, oxygens, etc., but this I spare you. It is enough for our purpose if these delightful cases keep our treasures in perfect preservation under circumstances that we should have said would be certain death, and we rather think that several of our learned friends, who "know everything," so to speak, would have said the same awhile ago. We often place bouquets of rare flowers beneath the glass and they remain fresh for weeks. One bouquet, in particular, had in the centre a spike of rare foreign lilies, only two of the lower ones being in bloom and eight or ten buds above. The spike remained in fine preservation, and every bud blossomed. There are many small and brilliant greenhouse plants which thrive well in these cases, and contrast charmingly with the deep verdure of the ferns, giving a lightness and elegance to the affair which is very agreeable. In selecting plants, it is desirable to get those which do not grow large, or which are of very slow growth, that they may not become too much crowded. Our largest fern reached the top of the cover some time since, and seemed disposed to take up so much more room than we could afford to give it, that we have sacrificed several of its beautiful fronds for the good of the other members of our "happy family."

FEBRUARY 25.

I have told you that some of the birds stay here all winter. We have become very intimate with the sociable little chickadees, and they really follow us round in the woods with an amusing little air of curiosity, and they do not hesitate to jump on the edges of our baskets and examine their contents, if we leave them upon the

ground. The plump little snow-birds and the wrens, and the creeper, and the nut-hatch, are all friends, and we intend to know a good deal about birds in due time, and by and by we may cultivate insect friendships, but the truth is that we are not yet sufficiently enlightened to get over a horror of bugs and all kinds of crawling things. Perhaps we shall when we know more, and Isabella has already begun to find entomology delightful, so far as she has gone, which is to the examination of the delicate gossamer wings of some of the bright little insects we find.

The birds, as a general thing, have but little fear of us; they seem rather to like us, and we often collect little groups near the piazza by a judicious distribution of crumbs. Mr. Willis has somewhere a pretty account of the success which he had in enticing birds to come and eat breakfast on the roof of his piazza in the winter, and how he and his children used to watch these little friends, seeing them come in flocks from the far-off cliffs in the early winter mornings, bravely battling the strong winds of the ice-bound Hudson and the snow-storm or the rushing rain; steering with trusting confidence to the sheltered spot where they were sure of finding the desired refreshment. We think we shall be as successful as Mr. Willis, for the birds know how to find out their true friends.

The morning after we arrived here, I looked out on the piazza, and there, to my astonishment, beheld a splendid peacock. "O Helen," I called, "did you know there were peacocks here?" She came with all speed, and so did Father and all the family, to admire the beautiful stranger who stood there in the bright wintry sunshine. We gave him a nice breakfast, and

every morning there we found him when we came from breakfast.

We hoped he belonged to the place, he was so decidedly ornamental, especially when perched upon a favorite post near the front door, his brilliant tail sweeping the steps. But Father said that he was the property of the gentleman whose country seat is next us, and that he finds his way to our premises through a hole in the hedge. He stays with us, however, most of the time, and likes our style of entertaining him. How handsome peacocks are! the blue around the neck of this one surpasses in brilliancy our favorite ultramarine, and the gold and green are inimitable; and as for the *eyes* in the gorgeous tail-feathers, they are wonders indeed. Peacocks seem not to have very estimable characters; their voices are discordant, and they are said to be quarrelsome, and "proudas a peacock" has become a proverb. But this one shows no touch of pride, and has a timid, gentle grace, that has won all our hearts.

FEBRUARY 28.

You would enjoy walking with us through these charming mountain paths, stopping every minute to examine the lovely mosses, or the opening leaf-buds, or to inclose with protecting sticks some little plant just struggling up through the dead leaves, whose locality we wish to mark, expecting that it will be adorned with a fair blossom by and by. Already the tintings of spring are touching many of the trees around us, and our walks grow daily more enchanting. From all these hills we get glimpses of quiet, rural scenery, and often views of wonderful beauty. From one point to which we walked yesterday, we looked over hills and valleys and glistening

water to the distant city. The air was clear, and as we gazed, we saw distinctly the spire of old Trinity. How strange it seemed. Here we stood in perfect solitude; not a sound to be heard but the occasional note of a forest bird, or the rush of mountain streams, — sounds so suggestive of solitude. The hand of man has neither spoiled nor improved these wild-wood retreats; the old trees and the young trees grow side by side, and every vagrant vine is allowed to rise or fall as “nature pleases.” The morning was perfect; the soft spring air was full of prophetic sweetness, the sky above had the blue of May, and the delicate breeze a celestial purity as if it came from heaven. And there was the tapering spire of Trinity Church, and below it Wall Street, and Broadway, and New York city, — that realization of all bustle and business and unrest, with its sights, and its sounds, and its surging tide of humanity, with their hopes and fears, their sins and sorrows, their “battle and murder and sudden death.”

MARCH 15.

“Winter is over and gone, and the time of the singing of birds has come.” The robins and the bluebirds have been here more than two weeks. Darlings of old and young are these heralds of the approaching spring. The robin is too well-known to require any description, and his sweet song is familiar to all. Blue birds also are very abundant here, singing delightfully and flashing their beautiful wings with a peculiar grace. On a tree quite near my window, a blue jay has just perched. Such a beauty as he is, larger than the common blue-bird and more distinguished looking, — brilliant in color, the long tail of the glossiest blue with curving bars of

black and tips of white, with white vest and graceful black collar, and a jaunty crest of glittering, purplish blue. Quite a dandy in appearance, and he somehow seems conscious of his good looks and vain of them. His song is peculiar; a rattling gush of noise not easily described, not very musical, though now and then you catch a sweet note. Blue jays, however, are not as good as they are handsome. They are lawless depredators on the rights of other birds, and accomplished and irreclaimable thieves. It is said they will even go to the nests of smaller birds and devour the poor little young ones, but that seems too bad to believe. It is true, though, that they have a bad reputation, and are not loved or trusted in bird society.

March is truly here, fitful and blustering, but promising something delightful to us through all its caprices, and often bringing, on its rushing wings, a soft glow, a sweet vernal breath that must have been rifled from the approaching flower-crowned April. The days too are growing long, and the sun looks in at our windows an hour earlier than he once did, and every day we are drawing nearer to those golden summer mornings in the country, of which we know so little. The streams "have all set out to meet the sea," in earnest, though our mountain streams have been on their joyous way all winter, no frost having fettered them; but just now the spring rains have filled them to the brim and they dash onward with a resounding roar. These dancing streams are the ornaments exactly adapted to the scenery around. As we go to church at the village a mile or two away, we cross seventeen of these graceful wanderers, some of them insignificant, it is true, not much broader than a floating ribbon as they glance through the meadows, but

Helen and I count every one, and each has its own charm. Some are rushing and foamy torrents, hurrying down the hills and dashing over stone walls and speeding away in answer to that mysterious call from the ocean; others are quiet and almost silent as they follow the same resistless law, and all have that inimitable grace which is the attribute of *water* everywhere. I have just learned Tennyson's "Song of the Brook;" and if you could see ours which "sparkles out among the fern and bickers down the valley," you would, I am sure, deem it worthy of a poet's song. We have adorned it with numerous pools, cascades, and rapids, and beautified it in various ways. When we first came here it was in a most neglected condition. The falling leaves had choked its flow, and the old limbs of trees which had fallen in from time to time had loaded it with unsightly sticks, and, altogether, it had a forlorn appearance. But Uncle Charles, who was here then, agreed with us that it had great capabilities, and I cannot tell you how many hours he worked with Helen and me to get things into better order. It is true that we often had assistance from very dignified hands and very fastidious fingers, but we three were the real solid workers. With India-rubber boots we were not afraid of pretty deep wading, and it is a fact that White-toes, our great black dog (black all but the white toes), did his part towards beautifying this favorite haunt of ours. He always went with us, and as we would poke out the old sticks which had so long had possession of all the desirable curves and hollows, he would seize them in his teeth and transport them to parts unknown. In one place we made a delicious pool, cool and clear, by piling large moss-covered rocks in a curve across the brook; then others we placed at suitable

heights and distances below these, and over all the water sweeps in a series of cascades very satisfactory to the proprietors. We have also begun our grotto or hermitage, in the construction of which we intend so to combine the beauties of nature and art, that if you do not pronounce it faultless when you see it, it will be no fault of ours.

Ever since we came here, we have been looking for a suitable place for this, and at length we think we have found one on the side of a steep bank up the hills, where is a scoop or concavity of considerable size, formed apparently by a slide of part of the hill at some former time. Straight up at the back of this curve grows a prettily formed tree, and just where it reaches the top of the bank it sends out horizontal branches, sweeping the ground above and forming a sort of bower over the hollow below. This space below the tree is sufficiently large for our purpose, and John has smoothed the ground nicely for us. There have been many fine days when we could work upon it, and we have made some progress already. We have begun to pave it with the prettiest stones that we can find, and these mountains abound in stones of soft tints, which are many of them adorned with soft touches of moss or lichens. We shall build rustic curves and recesses for rural matters of all kinds. I advise all young persons who live in the country to begin at once to build a grotto; it is most fascinating work, and new ideas keep coming into one's head all the time. When we are ready for that important step, we shall petition John to place some large, rough rocks, which we cannot manage, so as to form a circular front, leaving an opening for an entrance, and here and there an aperture to admit *enough*, for we

intend that the light shall be of the "dim, religious," hermit kind. We shall select our favorites among the wild vines which grow profusely on the hills, as soon as the advancing spring shows us their leaves; and these we shall train over the rocky front until they meet the tree above, and by and by they will form a thick and verdant covering that will captivate the eye and heart of any hermit of taste who may chance to be wandering in these parts. Within we shall have low, mossy rocks for seats, and a table-shaped rock for manuscripts and books, and a hermit lamp, and a small crucifix which Helen has carved out of smooth, brown bark, and all other matters that we can muster which can grace this sylvan lodge. We found the other day a beautiful stone, circular in form, but flat upon the top, and all around this ran a most curious embroidery of grayish green lichens, looking like a delicate floral wreath thrown down upon the stone. This will do to place our hermit lamp upon. We shall carpet our rock-paved floor with mosses and lichens, and press into our service the forest blossoms and all woodland treasures. Helen and I have really learned to do what may be called pretty hard work, for John's services are not always to be obtained at the right moment. He has an idea in his faithful head that there are some things of more importance to be attended to, and good-natured as he always is, it is impossible to dislodge this one idea.

"Your Father, Miss Helen," he will say, "said for *this* to be done, but after a spell I shall do what you wish." "After a spell" is too indefinite often to suit us, so that we frequently perform wonders ourselves. We have a plan in our heads which we hope to carry out with some help from John, and that is, to excavate a

secret passage to open on the hill above, as it is not very far and we are expert diggers already. A pretty little stream runs just below the bank on which our grotto is built, and Helen has constructed an anchoret's cup, as she calls it, of birch bark, and fastened it by a little chain to one of the branches of the overhanging tree.

By a gentle dip-down of the bough, as you stand above the stream, the cup drops into the water, and we can fill and draw it up at pleasure to sprinkle the mosses, ferns, and vines. I must own to you, however, that the lightness of the birch bark inclines our cup to float rather than to sink, but a smooth white stone which we have fitted closely into it, makes it work admirably. Hermits, of course, should not have worldly cups of china or silver, and this birch bark, with the "philosopher's stone" in it, is all in keeping. We have also a "scallop-shell," brought from the Holy Land, but no "palm-branch." Perhaps a fork of witch-hazel may do, and this we can have, as a tree grows close by.

Our tree above, which is a fine beech, will soon hang out its dense and beautiful foliage. Then our grotto will be shrouded in a mysterious green glimmer, and the light through the stirring leaves will play fitfully on the walls in true hermit style.

MARCH 25.

We, I mean now the younger part of our family, know little or nothing yet of birds, or flowers, or trees, or any of the "boundless store of charms, which Nature to her votary yields." But we expect to know. Father has always been a student in these matters, though of late years, having lived in cities, he has had few opportunities to indulge these tastes, but he has never lost his early interest in these pursuits nor forgotten his early

acquisitions, and he is ever ready to explore and examine and study scientifically everything which is presented, and he makes us understand things as we go along, and never gets out of patience with our stupidity, and now that we have come to the country to live, he is delighted to take up the old threads and follow the paths so familiar in earlier years. As for Aunt Emily, so delightful to her seems a wandering, woodland life, —

“On pastoral hill or pastoral vale,
By the swift stream or under the broad tree,” —

that she looks with a kind of envy on the Indians.

Not that the wigwams which she has examined, or those who inhabit them, come up exactly to her ideas of “high romance,” or even of tolerable comfort; but to “fold up one’s tent like the Arab,” presents a captivating picture of easy social life, so much more delightful than being tied hand and foot to houses and bureaus and bedsteads, and enslaved by all those fettering and wearisome conventionalities which fritter away existence. She says she always feels thankful that her lot in early life was not cast in a city. If it had been, she would have been a stranger to that which has been one of the greatest enjoyments of her existence, — an acquaintance with and tender love for all that is found in nature’s domain. As it was, however, she and her brothers and sisters dwelt in a fair New England village, where the encircling woods were set like a dark frame around the bright and beautiful plain upon which were clustered the tasteful dwellings of a refined and cultivated community, and a walk of a few minutes would bring one beneath the tall old pines, in the midst of rough rocks, mosses, and wild flowers. Those fragrant piny woods,

how delicious was the odor, and how mysterious and captivating the low ocean murmur amongst the branches, though no breath of wind might be astir! And below the bank the rapid river dashing down sea-ward, with romantic natural falls, foaming and tumbling over great black rocks, with no object in the world but to look pretty and picturesque; and the prim artificial falls smoothly gliding over wooden barriers, with no time for dimpling smiles or the flinging of feathery spray; but bringing with patient industry the wealth of waters, and even the wild freedom and fantastic turmoil of their giddy sisters, to bear upon the machinery of saw-mills and cotton factories.

Besides the woodland privileges, there was a college in this fair New England village, which dispensed intellectual feasts of a high order, both through books and men. Among the Professors was a gentleman of talent and varied acquirements, who was also a distinguished botanist. He said he could not feel easy anywhere unless the young persons around were cultivating those tastes for simple pleasures which would be to them a source of continual improvement and enjoyment. He invited several of the young ladies to study botany, offering to assist them at certain hours when at leisure. A class was formed of which Aunt Emily and her sisters were members. Many years have passed since then; the gifted Professor was called from the feast of life in his prime, and severed far and wide are those then forming the Professor's class. But she has never lost the tastes then cultivated for those quiet country pleasures. Every one of the fair tribe of blossoms which had its *habitat* in that New England village became a personal and beloved friend; and she never meets one of their

sweet faces anywhere to this day, without a fond recollection of that cheerful youthful group, and a grateful and affectionate remembrance of the accomplished scholar, who, absorbed as he was in the engagements growing out of a literary and professional career, yet found time to instill into the minds of those young girls such tastes for simple, natural pursuits, as have walked with them through all the vicissitudes of life and been a "joy forever." His memory is enshrined in their hearts, linked to the beautiful science he so loved.

Those sylvan tramps in those fresh New England woods, how delightful they were! At first for the mere pleasure of the stroll, and picking at random the flowers they found; then, as the interest grew with growing information, the plants were taken up, root and branch, deposited in the tin botanical boxes, and carried home to be examined with the most patient investigation; not by Gray's Botany, for that was not, but by Eaton's, Torrey's, and Nuttall's Botanies, and that charming book, "Bigelow's Plants of Boston," which is a great favorite of ours at this time. In all these books the flowers were arranged by the Linnæan system, or the Artificial, as it is called; about this I shall tell you by and by. What a pleasure it was to find a flower in the woods, take it home, examine and find it out without aid, and how faithful and patient were those young students in conquering the technical terms and understanding the minute descriptions. The girls all had books in which to register the names of their treasures, the botanical and common names, the families, time of flowering, etc., and a *margin*, as the Professor called it, in which to put down any item which the young student thought worth chronicling.

She says that one of the regrets of her life is the loss

of this precious manuscript of hers, which has disappeared in some of the movings and upturnings, and the only entry in her margin which she can remember is that the dandelion is not a *native* of this country, but was introduced from the Old World. It has borne transplanting wonderfully well. During the first summer of their botanical studies, they examined over one hundred wild flowers. Aunt Emily says the Professor would not look at a cultivated flower, however handsome, in a botanical light; he said they were fine to the eye, but *untrue*, like many cultivated things.

In addition to the flowers which these girls could find themselves, the Professor would go off on pilgrimages to wet and inaccessible places where they could not go, and return laden with rarities, such as the wonderful *Sarracenia*, or pitcher-plant; the *Cypripedium*, or moccasin-flower; the splendid cardinal-flower, the purple fringed *Orchis*, and *Kalmia*, or mountain laurel, which grew far from the village. Other wonders came stowed away occasionally in the Professor's box, for he was a student of nature in all her departments. Often a beautiful mineral, a gorgeous butterfly or glittering beetle, an elegant lizard or wonderful spider, and once a brilliant little snake. These choice treasures were received and examined with all the interest of youth and enthusiasm, — though Aunt Emily says that, to tell the truth, they were as much the dread and detestation of the lady, that perfect paragon of nicety, at whose house the Professor had rooms, as they were delightful to him and his young students. This lady said she had no objections to scientific pursuits and examinations in their proper place, "but *that* place was not in a well-regulated house; such a load of trash thrown right down upon a parlor

table or carpet, a horrid bug in a cut-glass tumbler, and another pinned up in the nicely starched window curtain! I should not wonder," she added, "if I found a snake in the vinegar cruet." (I think she would if she had borrowed the Professor's microscope.)

She said she thought it was more a person's duty to keep things in order than to hunt up all this rubbish which grows in the woods and belongs there, not in a nice parlor.

This is what she thought, and she is not the only one who thinks so; an elegant lady who has been with us, says she is exactly of her opinion; and Aunt Emily says that, after all these years, she will not say that she had not strong arguments on her side, for she well remembers that immaculate parlor when entered by that foraging party returning from an excursion. The green blinds drawn so as to exclude all but a faint light, the white curtains looped back exactly even, the Professor's books carefully arranged in his book-case, only a few handsome ones left out to adorn the polished centre-table, the chairs with perfect propriety sitting still in their places, the carpet guiltless of a shred; everything quiet, shady, cool, the very quintessence of nicety. Five minutes after, and who would have known that room for the same? It was indeed "enough to provoke a saint," as the lady used to say. But those young botanists (and the Professor as well) were then of opinion that chairs, tables, carpets, and even starched window curtains, were made to accommodate such treasures; and shocking as such sentiments are, to be expressed by a housekeeper, Aunt Emily acknowledges that to this day a flower, a forest blossom, especially of the kind she then learned to love, has in her eyes a value of a peculiar kind, which is

not possessed by velvet carpets, or inlaid tables, or any work of art.



Oxalis-violacea.

APRIL 1.

“ Again has come the spring-time,
With the crocus's golden bloom,
The smell of the fresh-turned earth-mould,
And the violet's perfume ”

To-day I have learned the piece in which is this verse, and the yellow crocus and blue violet are adorning the flower vase on my table. O Rose, we have found *the country* now. We thought we had found it in the winter, but within the past two weeks it has put on so many new things that we should hardly believe it to be the

same. It stands before us now, with its fragrant woods enveloped in the soft green veil of early leaves, with silvery silken tassels, or crimson tinted tips; with its singing birds, its springing blossoms, its changing skies, its soft wood-odors, its wonderful rural noises that have such a clear ring and sound so like the free, fresh life of the woods and fields. Ah yes, all things, noises and all, are softened, and beautified, and glorified by the magic touch of spring. Now is the time to be in the country, to watch from day to day these fair transformations, and to experience that pure and deep delight which comes from communing with the works of God.

We found no flowers in blossom in March, though we fully expected to, and it seemed to me that we looked under almost every leaf in the woods. We found many in a state of preparation, and doubtless should have found some in bloom during the last few days of the month, if a pouring rain had not kept even our daring feet within. But on this lovely April morn the sun looked through fleecy, floating clouds upon as fair a scene as the eye could wish to see. We were all tempted out soon after breakfast, and reaching the hills, I saw on the edge of a little precipice, a few soft, green leaves growing far up on the pinkish stem of a delicate plant, and above these a sweet blossom of white, flushed with pink, looking down upon five or six smaller blossoms of the same shape and color, only on shorter stems and not half as large as the top flower. I looked at it with delight, thinking it a lovely family, the mother and her little children, and was just calling to Helen to come and see what I had discovered, when she called out to me, "O Mary, come here; I have found a hen and chickens;" and to be sure she had found another family

of the same kind. We thought this might be the spring-beauty, as a lady had told us that we probably should find that first. But we were mistaken. Gray's Botany forced us to give up the pretty name and take that of *Thalictrum-anemonoides*. Should you think they would have the heart to give such terrible names to delicate, guiltless blossoms? I dare say these scientific persons would think it an improvement if the human blossoms were classified in the same style. How nice to have them say to you, "Good morning, *Fraxinus-quadrangulata*;" or to me, "A fine day, *Amsonia-tabernæmontana*." Suppose we should give up Rose and Mary and take these sweet and simple appellations. So much for our first spring flower, coming the first day of April, the pretty, delicate wind-flower, for it is a species of *Anemone*. Seriously, however, Rose, you must not falter before hard words, for in this guise does Science disguise herself, or rather the disguising is done by those votaries who lead you to her shrine. You cannot escape them, whatever path of science you may choose.

Botany, the beloved of our hearts, is by no means an exception, though Nature, her priestess, pure and simple, "in pastoral array," waits beneath the trees for you, takes your hand in her very own, leads you over mossy rocks and by sparkling streams to dewy recesses where smile her own fair children. As you gaze upon these, decked in robes of violet or tints of rose, with heads serenely uplifted or bells of buff lowly bending, your inward thought is that some soft and endearing appellation awaits each one. Alas! I grieve to say that this is but a fond delusion to be speedily dissipated. Now you must read carefully what is coming, — a few more of those choice botanical names by which my eye has been arrested. What do you think of these?

Cerastoschœmus-macrostachya,
Rhynchospora-Krieskernii,
Amianthum-muscætoxicum,
Corrallorhiza-odontorhiza,
Plantanthera-Clephariglottis,
Pycnanthemum-clinopodioides,

and dozens of others I might quote, as bad or worse.

Should you not think that a moderately gifted speller would be forever deterred from entering such a trying field; and how children can wield such unwieldy implements I cannot imagine, yet certainly children ought to begin to study botany early. I cannot refrain from giving you some definitions of botany in a late scientific and popular article.

"Botany is the science of plants. Theoretic or pure botany is either special, a part of natural history consisting of horismology, or, as it is usually called, terminology; phytophraphy (the description of plants) and taxonomy, or systematology (the laws of arrangement); or it is general, comprising organography (the description of the organs of plants in relation to their external appearance) and histology (the science of the elementary tissues of the organs), together constituting phytotomy, or the anatomy of plants, and with phyto-chemistry forming the basis of phyto-physiology (the science of their vital phenomena), and of phyto-pathology (the science of their diseases, etc). Important accessory branches of study are found in phyto-geography, the science of the distribution of plants over the globe; phyto-oryctology, or, as Enlicher calls it, phyto-history, the science of their fossil remains," etc. If botanical study is not made a sealed book, it is not the fault of the book-makers.

But do not be deterred from studying and loving it. Aunt Emily says she thinks it is possible to enjoy a great deal, and have a very tolerable knowledge of plants, their structure and habits, and when and where to find them, without fighting one's way through all these phytos, but she feels no alarm about our becoming very scientific, thinking that too great depth of acquirement is not the sin of the present order of young ladies. She says also that there is the great and unanswerable argument for scientific names of some sort, that when you use such you know what you are talking about. Whether the words need be so long and so hard to spell is another thing. It is true though that in one village you may hear of May-flowers, in another of ground laurel, in another of snow-drops, in another of trailing arbutus, and when you see them they are the same thing. If they had told you of *Epigæa-repens* you would have known at once what was meant.

So of Anemones and many other flowers, — they call them May-flowers or spring-beauties, or any pretty or fanciful names. The trouble must be that the world in general will not fix upon any popular name, and so science must come in to make things exact. But even that admission is not enough to reconcile quite young beginners like us to words of six syllables in an unknown tongue, as —

Apocynum-androsæmifolium,
Lycopodium-alopecuroides, etc.

APRIL 15.

Do you think we live in the woods? We do, in a measure, it must be confessed; still we do not spend all our time "flower-hunting," though we think the summer

will be quite too short, and we cannot bear to lose the delicious airs which meet us on all the hills. Aunt Emily says the world has been too much with us, and it will not hurt us to be buried awhile in these green solitudes.

We think our resources tolerably satisfying, although the lady I told you of said she should die of the blues if condemned to live in the country. We have books, friends, visitors, music, rides, and mountain rambles, with the privilege of finding ourselves in the hot and dusty city at any time when we choose to spend one hour to accomplish it.

But hardly anything is so delightful to us as the feast to which Nature invites us at morn, at sunny noon, at dewy eve, and we intend to neglect a great many things which some persons consider duties; at the same time, we shall attend to a great many things which some of our city friends think might just as well be neglected.

We have household employments that come every day, and we study somewhat, though not very elaborately; still it is studying, and Father expects the Latin lessons to be prepared at evening at any rate. But he is very indulgent, and many of our daily avocations take but a few minutes, and the studying is usually done out-of-doors. It would be trying enough to take a stupid Latin book and sit down in the house these charming mornings; but transport the books to the rustic seat beside the grotto, or under the great chestnut-trees by the brook, where the birds are singing and everything rejoicing, and it is no great hardship even to dig at Latin roots. We all agree upon one point, that no books can teach us better lessons than we can learn on the hills and in the valleys, and that to the reverent and faithful

student of God's works, there comes a fresh and healthful spirit, a contentment and delight which is an exceeding great reward.

And when you are out in the dusky old woods, when their wild freedom and solemn grandeur sink into the heart, you have no idea of how little consequence seem dressing, and visiting, and the gossip of neighborhoods, and the unending forms and ceremonies which are heaped mountains high about that highly civilized state which is called *society*.

It is really astonishing to find how many things can be done without, and yet every comfort be secured, every taste and talent cultivated; and I know that if persons lived in the country and learned to feel an interest in all that nature offers, they would not be obliged to invent so many absurdities in the way of fashions and pursuits to prevent life from hanging heavily on their hands. We find also that many of our visitors, even the fettered worshippers of city life, the bound slaves of fashion, who have no more individuality than the squares of a chess-board,—even they confess that the usages of the dusty town seem unnatural to them, when they find themselves beneath the heavy shade of these old trees, surrounded by the grand and simple forms which make up the domain of Nature. In the midst of these surroundings they sometimes ask themselves the question if there is not a simpler and a higher life than they have yet found.

We intend to examine every flower we find, and I shall send you the botanical name and the picture of the flower when I can, and you must read the botanical description and put down names as we do; and when you are here next summer, we will go over the flowery

path again, and no doubt make many additions to our list. I hope you will learn to draw flowers from nature. It is the only true way, and by patient practice it soon becomes a delightful employment. Begin with a simple stem, with a leaf or two and a bud perhaps, or take a little simple flower by itself, and draw it just as accurately as you can. Try a crocus, for that is easy, or a single flower of hyacinth or primrose. These are blooming in your yard, and many others perhaps as good to experiment with. You will be charmed with the pursuit. And, Rose, it is so satisfying to study botany by the flowers you find yourself in the woods. I have been able to find out several by my own wits, and when we get puzzled, as we sometimes do, Aunt Emily and all, we have only to put the difficult specimen in a vase till Father comes home, and he takes that and the microscope and Gray's Botany, and goes to work in the regular scientific style.

He cuts off little bits of the stem and leaves, and puts them under the glass, and if he finds layers of wood in the stem, and net-work for the leaf-veins, and a few other things, he calls it an *Exogenous* plant, or belonging to the First Class. But if he finds no layers in the stem, and the leaf-veins parallel, he calls it an *Endogenous* plant, or belonging to the Second Class (and there are but these two Classes of Flowering Plants), and having found the Class, he goes on to other distinctions, and always finds out what the flower is. It is true that we examine flowers in the same way, only we have not the patience that he has; and when a flower seems difficult, or not very pretty, we are apt to put it by for him, knowing that he will not give it up until he has made it spell out its own botanical name, no matter of how

many syllables it is composed. It is my opinion that he likes better to examine some tormenting specimen to which you can get no clew from its resemblance to anything else, than those favorites of mine which you recognize at once as belonging to a certain family, because they look so much like some fair floral cousin whose acquaintance you have already made. Aunt Emily says that she studied Botany by the Linnæan, or "Artificial System," as it is called, which is founded upon the number of stamens and pistils in flowers; those having three or four stamens being placed in the Third or Fourth Class, going up to the Twenty-fourth Class; and she still loves this system because your interest is enlisted at once by beginning with the beautiful blossom. But this system is found, at the present day, to be imperfect in some respects, and uncertain also. Gray's system is called the "Natural System," and is intended "to rank those plants next to each other in the classification which are really most alike in all respects, or which are constructed most nearly on the same particular plan."

This system has many advantages over the Artificial, and Professor Gray's text-books are considered *the* books for botanical students in these days. But though the Natural System may be the best, I think it is difficult, because roots and stems and seed-vessels are of more consequence than blossoms, and these are so perplexing to beginners; and to go to the root of the matter one must have a microscope, and every one who loves flowers and would like to understand about them cannot have a microscope.

But I use Father's, and I wish I could tell you what inimitable beauty the least little bit of an anther or calyx puts on under the glass. One little stamen is more

beautiful than any full-blown flower seen by the naked eye, and the inside of a flower or petal, which you can hardly see if you look ever so sharp, and which is often hidden from sight until the flower is taken apart, will look as if covered all over with jewels, and little coronets of pearls and diamonds are set upon every tiny tip. It almost disaffects one with what we call eye-sight, to find what a world of beauty is hidden away in every flower; and not the flower only, but the soft and almost imperceptible down on every common leaf and stem, is sparkling with dewy gems and sweet colors, and a little sprig of moss looks like a tree from the enchanted forests of fairy land.

APRIL 25.

The flowers are coming in such gay profusion that we are afraid some of them will escape our grasp. We find quantities now on all the hills and in all the valleys, but we are often haunted with the thought that perhaps in some lonely dell or glade some beauty may expand its bright petals, and we not be there to see. But we have nothing to reproach ourselves with in the way of research in the region over which we travel. We know very well there is no blossom, however humble, that has not received a welcome from us. This morning, as we stood on the piazza after seeing Father ride away, the perfect beauty of the day made all of us feel like spending a good part of it in the woods, and Aunt Emily and a lady visiting us, Isabella, Helen, and I, were soon ready for a sylvan tramp. As we left the house we saw Sarah, the cook, standing at the kitchen door with a wistful look upon her face, and Aunt Emily said, "Sarah, would you like to go out on the hills?" "O yes, ma'am, if I could leave my work." "There is no work

of any consequence till it is time to get dinner; you can come if you like and stay several hours."

Sarah looked delighted, for, though not a "scientific botanist," she has a decided taste for woodcraft, and she soon came along with White-toes, who had just returned from his never-neglected escort of Father to the station. Sarah spent hours in exploring the mountain paths, and found as many flowers as any of us, and arranged a tasteful bouquet for the dining-room on her return. The pretty flowers of the *Hepatica*, our New Year's friend, are out in squadrons. They are prettier even than we thought them, so varied are their shades, as they lift to the light their bright blossoms of white, lilac, and blue. We have also found another very pretty *Anemone*, with a delicate, pinkish white bell nodding over fair green leaves. It is the *Anemone-nemorosa*. And the real spring-beauty has come (*Claytonia-Virginiana*); frail and fair this is, looking hardly stout enough to stand up straight. It sends out from its fragile stem two long green leaves, and above these the flower-buds are curled up; these open, the lower ones first, and so on till all are in bloom, delicate blossoms of palest pink with a deeper line in the centre. These are found in moist woods.

We transplant many of these fair wild flowers, and hope they will come up and blossom early next spring. We have a feeling, however, that these children of the forest feel a distaste for any artificial homes, and it is said that they gradually disappear from the vicinity of cultivated lands; but we set them in what we call our forest garden, amidst their woodland kindred, and we hope they will never find out that ours is the "foot of civilization," since that is what they flee before. But



we have not forsaken the "garden flowers" which were our delight in all the years of city life, and we have

flower-beds around the piazza which John is putting in order, assisted by the taste of the family ; and we intend to have the loveliest of flower gardens, genteel, cultivated, fashionable *front-yard-flowers*, growing in trim propriety just where gardeners say they must, for we love these with a love that has grown up from childhood ; but it is a different kind of tenderness from that which we feel for the beauties of the wild woods, those bewitching aborigines who have stolen into our hearts, and repay our affection with tints and scents of the gayest grace and sweetness whenever we visit their domains. I wish you could see them springing, with their own wild freedom, among the clefts and fissures of the rocks, decking the dizzy precipice with their airy bells, and growing with careless security in strange and dangerous places where no art of man could ever *make* them grow, even if any human foot could scale the "toppling crags" they so delight in adorning. We went the other day on a long tramp over the mountains to a wild, sequestered spot, where a waterfall dashes over high rocks. Stately old hemlocks sent up their solemn shafts of almost black verdure all around the waterfall, and the depth of shade beneath them was almost like night ; while, in glowing contrast, the high cliffs opposite were bright with a flood of sunshine, and gay with blossoms of Anemone, wild columbine, blood-root, squirrel-corn, and other early flowers, which were springing from every crevice, tier above tier, looking down with an air of defiant beauty and perfect safety, as if saying, "Catch us, if you can ;" and catch them we could not, with all our enterprise, for the face of the cliff was almost perpendicular, and even Helen had to confess that their fortress could not be stormed by any

battery we could bring to bear upon it. So we left them in their unscalable fastnesses.

It is charming in our walks, to see little colonies all around, arrayed in robes of light and grace, clustering in fair neighborhoods and many varieties about the roots of some protecting old tree. Dancing in the sunshine with every passing breeze, they have the gay and social look of some favored human neighborhoods, where you see fair young heads nodding to fair young heads.

We feel also the greatest courage about having a flower garden in the country, and a consignment of rare Southern roses and other plants from a friend, has helped us to begin in earnest. When we lived in the city, we thought we had pretty flowers in that little bit of a city lot, that beloved and cherished border around the green oval plot in that trim city yard. And so we had. Flowers are beautiful everywhere, but these were shut in with a great high fence, to keep out intruders; and everybody's great high house looking down on every side, and standing between them and the genial sun, the pure air, and the refreshing shower. It seems like an insult to these free, sweet denizens of nature, to put them in these prisons, though, to be sure, their sweet influences are needed there. But here we have so much out-of-doors, that our flowers, wild and tame, can have the sunshine and the shower in their season, and the "misty mountain winds shall be free to blow against them," and the bird, and the bee, and the butterfly shall visit them, and they shall look through the low palings, and nod and smile at the passing children; and the children shall be treated to many a *posy*, and their young love encouraged for these floral friends who will be faithful to them through life. We intend to break off

our beautiful flowers whenever we wish, for we mean to stand in awe of no gardener, like the lady who told us, the other day, that she longed to give us some flowers from her greenhouse, but was afraid of her gardener.

To-day we have found yellow violets, the first I ever saw. I have learned Bryant's lines upon the yellow violet; he says he found it "blossoming beside the snow-bank's edges cold." We were not so fortunate, for the snow went from here long ago, though Helen says she supposes, when he wrote that, he lived where the snow stayed till March or April, so that, after all, he may not have found them any earlier than we. It is a beautiful flower, brilliant yellow, and "streaked with jet the glowing lip." As to the blue violets, time would fail me to describe them in all their variety and beauty. Every species grows here, I should think, though perhaps not every one, for there are nearly twenty varieties, but we have found a great many. Some that grow in damp spots are immense, the flower-stalks a foot or more in height; others growing on the rocks have pale blue petals and a very long spur; others are light blue, streaked with darker blue, and upon the mountain top we found the sweet-scented white ones. What a pity that the wild blue violets are not fragrant, so dear are they to the universal heart.

But on a bank at some distance in front of the house, we found, the other day, fragrant blue violets in quantities, all growing among the grass so thick, that, as you stand upon the steps, you can see the dash of blue over the bank, and the faint, delicious odor comes floating to you on every vagrant breeze. We examined these, and found them to be the sweet-scented English violets, placed here probably by some former occupant of the

house whose good taste is fully appreciated by his successors.

APRIL 30.

I send you a list of the wild flowers to be found in



Orchis-spectabile.

April, and will do so through the summer. To-day we have found a floral curiosity, which interests us amaz-

ingly; a double Anemone, looking like the most fairy-like and delicate little white rose. We fear to transplant it, but have marked the spot so as to know where to find them next year. Wild flowers are generally single, the doubling being merely the expansion of stamens and pistils into petals, and this is produced chiefly by cultivation. The *strict botanist*, I believe, looks upon double flowers as monsters, but we are not strict botanists yet, and never shall be strict enough, I hope, to think this charming double Anemone a monster. We think it a perfect beauty, and hope to find ever so many more.

For a week we have been watching a lovely spring Orchis (*Orchis-spectabilis*), a plant fair enough to adorn the most fastidious flower garden, as indeed are many of our woodland friends. This has graceful green leaves, something like lily of the valley, and from these, the flower-stalk shoots up six or seven inches. To-day, several of the peculiar and elegant blossoms have opened, the arching petals are of delicate lilac, and the lip snowy white.

There is a row of pretty sassafras-trees just beyond the stable, on the hill-side. These are new and interesting trees to all of us. The leaves are soft and shining, and of varied and curious shapes, and leaves, stems, and roots, have a spicy, aromatic taste. In Europe, this tree was once greatly celebrated for medicinal virtues which it was supposed to possess, and an express treatise was written upon it called "Sassafrasologia."

We have found also the *Dirca-palustris*, or moose-wood, the only representative in North America of the Order Thymeleaceæ, Mezereum Family. The shrub was covered with curious yellow, tubular flowers, growing in bunches of threes, but no leaves have yet ap-

peared. Every day that we go out, we find something new, and the changes from day to day seem like magic. The Anemones and violets, and pretty wild geraniums, appear, as it were, without giving any warning; the columbines, bloodroot, and squirrel-corn, are not to be numbered, and the beautiful *Cornus florida* lights up the woods in all directions; the "floral preachers," jack-in-the-pulpit, are almost as numerous as their gayly robed congregations, such myriads of them start up all along the brooks. Some of these are very handsome, a peculiar whitish green, with rich stripings of purple and maroon. April has gone like a dream. It has been a soft and delightful month, with veiling mists and those tender showers that seem so much like the tears of children, — a gleam of sunshine all ready to sparkle out, and indeed sparkling out, before the tears are dry. Sweet, fitful, changeful April! thou shalt be ever dear and ever welcome in thy own bright time of promise, and we should indeed mourn sadly thy departure, were not thy fair-eyed sister even now in sight in yonder meadows, crowned with "cowslips and the nodding Trillium."



FLOWERS OF APRIL.

CLASS.	ORDER.	GENUS. SPECIES.	COMMON NAME.
1.	1. Ranunculacææ.	Anemone-nemorosa.	Wind-flower.
"	"	Hepatica-triloba.	Liver-leaf.
"	"	Thalictrum-anemonoides.	Rue anemone.
"	"	Thalictrum-dioicum.	Meadow rue.
"	"	Ranunculus-fascicularis.	Early crowfoot.
"	"	Caltha-palustris.	Marsh marigold.
"	"	Helleborus-viridus.	Green hellebore.
"	"	Aquilegia-Canadensis.	Wild columbine.
"	"	Actæa-rubra.	Baneberry.
"	5. Berberidacææ.	Caulophyllum-thalic-troides.	Blue cohosh.
"	10. Papaveracææ.	Sanguinaria-Canadensis.	Bloodroot.
"	11. Fumariacææ.	Dicentra-cucullaria.	White squirrel-corn.
"	"	Dicentra-Canadensis.	Purplish squirrel c'n.
"	15. Violacææ.	Viola-blанда.	White violet.
"	"	Viola-cucullata.	Common blue violet.
"	"	Viola-palmata.	Hand-leaf violet.
"	"	Viola-sagittata.	Arrow-leaf violet.
"	"	Viola-pedata.	Bird-foot violet.
"	28. Geraniacææ.	Geranium-maculatum.	Wild geranium.
"	31. Rubacææ.	Zanthoxylum-Ameri-canum.	Prickly ash.
"	32. Anacardiacææ.	Rhus-aromatica.	Fragrant sumach.
"	36. Sapindacææ.	Acer-rubrum.	Red maple.
"	39. Rosacææ.	Prunus-maritima.	Beach pea.
"	"	Potentilla-Canadensis.	Cinquefoil.
"	"	Fragaria-Virginiana.	Wild strawberry.
"	50. Saxifragacææ.	Saxifraga-Virginiensis.	Early saxifrage.
"	"	Tiarella-cordifolia.	Mitre-wort.
"	"	Chrysosplenium-Americana.	Golden saxifrage.
"	51. Hamamelacææ.	Liquidambar-styraciflua.	Sweet gum.
"	53. Araliacææ.	Aralia-trifolia.	Ground-nut.
"	59. Compositæ.	Taraxacum-dens-leonis.	Dandelion.
"	87. Aristolochiacææ.	Asarum-Canadense.	Wild ginger.
"	93. Lauracææ.	Sassafras-officinale.	Sassafras.
"	"	Benzoin-odoriferum.	Wild allspice.
"	94. Thymelacææ.	Dicra-palustris.	Leatherwood.
"	103. Empetracææ.	Corema-Conradii.	Crowberry.
"	108. Myricacææ.	Myrica-Gale.	Sweet gale.
"	"	Comptonia-asplenifolia.	Sweet fern.
2.	112. Aracææ.	Arisæma-triphyllum.	Jack-in-the-pulpit.



Epigaea-repens.

MAY 5.

Aunt Emily finds many flowers here which do not grow in the old New England woods, where she and her sisters studied botany, but she thinks she would be

almost willing to give up these new friends, charming as they are, if she could but find the beloved of those early years, the flower of flowers in her esteeming, the *Epigæa repens* of the botanist, the far-famed trailing arbutus of New England, the May-flower of the Pilgrims, the sweet, shy, fragrant woodland darling. But alas! it grows not here, though we were determined that it should, and faithfully did we search for it, literally leaving no stone unturned. The rocks and ravines seem secluded and wild enough for it to hide in, and many spots seem suited to it.

Aunt Emily had often told us of its peculiar fragrance, such as belongs to no cultivated blossom, — a breath of forest odor, an inimitable wild sweetness that haunts the memory forever and is never mistaken for anything else. We fully expected to find it here, but being disappointed in this, Father said he would do the next best thing; so he wrote to a friend of his, in his former New England home, requesting him to send him some roots, and soon after a son of this gentleman, coming to the city, brought with him a box filled with these favorites. Most of the blossoms had fallen off on the long journey, but a few remained to give those of us who had never seen them an idea of their rich and rare perfume, their waxen beauty, and soft pink shadings. It was my mother's favorite flower, Aunt Emily says, and I know it will be mine. We hope these plants will thrive with us. Father selected sheltered spots beneath trees, somewhat like those where he used to find them in his boyhood, and the strangers were placed with every care in their new home. It was, of course, too late for any flowers this year, but we find that some of the plants are sending out the fresh shoots which give the next

year's bloom, and we think these pets ought not to regret the transfer from the snow-banks of their native forests to the more genial airs which breathe around them here. Many of the graceful and fragrant blossoms with whose names we have become familiar, and which grow in



Trientalis-Americana.

profusion in the woods of Maine, we cannot find at all in this softer clime. We look in vain for the exquisite little *Linnæa-borealis* or twin-flower, the only species of the genus, and named for the immortal Linnæus, and a favorite of his, therefore doubly dear to every botanical

heart. This is a delicate little vine, sending up frail stalks upon which nod two little rose-colored bells of rare beauty, and a fragrance next to that of the peerless May-flower. Neither can we find the *Trientalis*, or star-flower, an elegant little plant, the starry white blossom crowning a whorl of soft green leaves; nor the *Polygala paucifolia*, or gay-wings, as it is fittingly called, for the bright blossoms grow amidst dark, shining green leaves. and the deep verdure of mosses, and the winged and crested rose-red, or purple petals, might easily be mistaken for brilliant little butterflies; nor the *Potentilla tridentata*, the only one of the many *Potentillas* with white flowers. All the others are yellow and grow everywhere, but this white one is rare; and once a celebrated botanist from some distant place visited the New England village where Father and Aunt Emily lived, and finding this white *Potentilla* growing abundantly in the college grounds, exclaimed, "Well, I have travelled all the way to Canada to find this flower, and here are thousands," and this remark clothed the unpretending little plant with a certain distinction in the eyes of the "Professor's Class." Our familiarity with these New England flowers which we have never seen growing, is owing chiefly to correct paintings of many which Aunt Emily has, and to pencil drawings which we think almost more beautiful than the paintings.

MAY 15.

The birds have come from all quarters. We see new ones every day, and are almost discouraged about getting personally acquainted with them. They will not stand still to be picked like the flowers, and are so full of business and bustle that they go and come like a flash.

But we know a good many, and find them delightful additions to our rural home. Would you believe it

possible, Rose, that these sweet singers begin their matinéés at about three o'clock in the morning. Only think of it! I never realized, when we lived in the city, that three o'clock was morning at all. I thought it was the deepest and darkest of midnight hours, and I cannot believe now that it is anything else there, in those city chambers, so carefully darkened, and the dim gas-light burning through the night, but here in the country the "morning twilight" begins at that time. I say here in the country, because here day and night are allowed to come and go in the way, and at the times God has appointed; and at the very hour when many of the city revelers are preparing to retire for *the night*, over these fair fields the gray light of dawn is stealing, and the minstrels of the woods are getting up their grand morning concert. I cannot describe to you the solemn sweetness of that hour of prime, when, waking in the dim twilight of the early summer dawn, just as "the casement slowly grows a glimmering pane," you listen to the deep, deep *hush*, which seems folded around everything like a garment. Suddenly, from the trees beside your window you hear a faint, sleepy-ish twitter, then another more wide awake, then a faint gush of song, then a louder and longer from near and far, then another and another, till the universal chorus wakes, voice answering voice, and every bird on every bush joins in what it seems to you *must be* and *is*, a morning song of praise and thanksgiving.

This sweet, mysterious, spontaneous day-dawn song, from the shrubs around and from all the dewy leaves in the solemn recesses of the dim old woods, must be *heard* to be appreciated or *believed* in. And then to rise when the sky is just flushing with rose and purple tints, to

open the eastern windows and take in the scented morning air, and before the sun appears, to look over these slumbering valleys to the watching hills beyond. The thick, white mist fills the mountain meadows, shrouding all the lowlands, while here and there rise out of it the tree tops, like islands in a quiet lake, and the distant hills peep darkly over all. Then as the dawn grows and the sun is coming, to see this misty lake disturbed and surging, and hosts of shadowy troops hurrying like a routed army, escaping from point to point in disordered ranks, often striving to pitch a white tent in the clefts of the hills, but discovered and scattered, while the conquering hero comes forth from gold and crimson curtains, and the valleys are flooded with light, and every dew-drop becomes a sparkling gem. This morning glory must indeed be seen to be believed in. Not that I mean to give you the impression that we rise always at day-dawn, or see every sunrise. O no, for we believe in a good amount of sleep, though we are learning to take more of it at the *other end*. We have no idea, however, of being country dwellers without hearing for ourselves that "melody of morn" which makes the woods rejoice, or without seeing for ourselves the wondrous beauty which earth and sky put on to welcome the Lord of Light, or without knowing, by our own sweet experience, what a summer sunrise is.

MAY 27.

May is bringing her vernal offerings in profusion, and the trees, now all arrayed in summer verdure, almost eclipse the flowers. Some of these are flowering trees, and several are new even to Father and Aunt Emily, and all are new to us younger members of the family, who know but little beyond a tree's being a tree. But we

are learning, and already have discovered what a charm it gives to a mountain ramble to be acquainted with the plants which meet you on every side. It gives a perfect interest to a woodland stroll, and lures you on and on untiringly to search for another and another floral favorite. A botanical friend of Father's spent a few days with us recently, and it was delightful to go out with him. He seemed to know everything from the "cedar to the hyssop," and would greet any simple little wild flower as if it were a dear friend; and he found multitudes of friends, and brought home such loads of trash or treasures (as the taste may be), that Aunt Emily said she felt as if carried back to the old days at home, when she and her comrades did the same thing. We shall have no excuse if we do not become familiar with all that these hills and vales offer us, since, in addition to the aid which we can get from Father and Aunt Emily, so many of our visitors are skillful interpreters of the mysteries of nature. Since we came here we have taken great delight in watching the variety and beauty of the sky and clouds, and it seems surprising indeed that there are so many, even of the intelligent and cultivated, who hardly know there *is* a sky. But here one can hardly help knowing it, there is so much, as a little girl who was here from the city said. She was sitting on the piazza, looking upward at the broad expanse which was without a cloud, but tinged with the golden glow of sunset, and with an unconscious reverence of tone and manner, she said, "Mary, there is a great deal of sky here, — more than I ever saw in New York." And the stars also seem to me, as well as to little Lilly, to outshine all city stars. Stars, I suppose, do look down upon the crowded city as well as upon the sweet country; for I have seen the

grace of starlight and moonlight touching the fronts of city palaces, but somehow the gas-lighted streets, and the gas-illuminated windows, and the glitter and the glare of the lights of this world, seem to say to the "quiet lamps of heaven," we need you not, and if you will persist in shining, we shall take no notice of you. Blinded indeed are they, and willfully blinded as well, who will not take the pains to realize that "there is one glory of the sun, and another glory of the moon, and another glory of the stars." This little girl who has been staying with us, ought not to be condemned to a city life. She was made for a wild-wood blossom, and would sparkle with the light and grace of the heart's happiness, if she could wander like a breeze upon the breezy hills. Her mother says she is fretful and troublesome at home, always asking "What shall I do?" that question which no child, with the exhaustless resources of young existence, ought ever to ask, and which few or none do ask who have hills and valleys, flowers and streams for playthings. Her great desire is to be out of-doors, and of course she cannot be permitted to roam New York city by herself, and the set walks with a nursery-maid are distasteful to her; but Aunt Emily says that this little Lilly would be no trouble to any one if she could be allowed to amuse herself with those simple country pleasures which satisfy the heart of childhood. It is the city child, with a room full of costly toys, and a maid to submit to childish caprice and imperiousness, who is dissatisfied and querulous, and who insists upon intruding its childish exactions upon those who would gladly escape them. But all the weeks Lilly was with us, she was satisfied and happy, without its being necessary to make one effort to entertain her. She entertained herself perfectly all day long,

strolling through the fields and climbing the hills, gathering every flower she could find, often bringing home her apron full of buttercups, which were great favorites, stringing these into wreaths for the hair, and the golden circlet gleamed with singular grace in her wild, dark locks. She said she never liked the shape of the bouquets which her mother bought in the city, and she would arrange flowers for an admired little vase with a free and fair harmoniousness that one would not expect from such a child. Clover-leaves she admired, and it was really surprising how many different *patterns* she found on them, as she called the various stripes and shadings, and a four-leaved clover seemed really to whisper some childish charm to her young ear. She had an eye of admiration for every bird and butterfly; indeed all animate and inanimate nature was charming to her, the visits of the peacock were delightful, and a bird's-nest a perfect mystery of delight; and with a zeal equal to Helen's, every stray kitten, however hideous, was enticed into the back settlements and bribed with bread and milk to forego its wildness and remain to be petted and admired; and she and Helen so devoted themselves to cultivating the moral sense of White-toes, that his onsets on his natural enemy were relinquished, at least while they were mounting guard over him, and he would stand by with an expression of lofty contempt, and see one of those scarecrows regaled with a nice breakfast, and called a "sweet little kitty." Nor was this little girl averse to any of the quiet feminine pursuits, for, after her long strolls, she would, with perfect interest, sit down upon the steps to read, or sew, or paint pictures in little books, or string beads, or play with paper dolls. What a shame it is (if it is not wicked) that a child

with such ability to prepare from the most simple and innocent materials her own exhaustless and healthful feast of happiness, should be condemned to brick walls, and paved streets, and to a fretful and unsatisfied childhood. And this little girl is but one of thousands and thousands, who are in reality torments at home because simple pleasures are denied them. Aunt Emily says she would write a book about these "Sorrows of Childhood," if the subject did not make her feel so melancholy. Helen advises her to write one about the "Joys of Childhood," in such a way as to put the sorrows out of countenance.

MAY 31.

How the time does fly! The last day of May is here, and O dear, how the beautiful time of year is running away. April was just such a month as April should be, soft, misty, showery, shiny; and the "delicate-footed May" has followed with her own distinctive charms. More sunshine, deeper verdure, new flowers, new birds, one or two thunder-storms, and one most gorgeous rainbow. Only one chilly rain, and that passed away, leaving a summer softness on the air. Every day, I believe, we have been out, and seldom returned without bringing some new flower to admire and examine. We know this cannot last always, and we fear that the flowers of summer will not be as enchanting to us as these early spring ones have been. I think, however, that we shall probably feel an interest in them, if their showy splendors do not charm us as much as the delicate graces of the first coming blossoms. Such a profusion of flowers as there are now, and so many of the same kind. In some localities, the yellow violets take the lead, throwing a positive glow over the chosen spots.

Upon a bank a little below the Green Lake, where old trees are growing with their gnarled roots in and out of the dark, rich soil, these bright blossoms are peeping out from all the rural crevices, making the old trees look gay; and all along the banks of the streams, above them and below them, and dipping their soft leaves into the hurrying waters, stand groups and groups of blossoms of all tender hues and graceful shapes. Some of these flowers look so ethereal that you would not suppose they could bear an adverse breeze, but they can bear a good many. These frail-looking Anemones, delicate as a snow-flake, are not afraid of anything, neither are any of the floral sisterhood. One hates to leave these tender treasures all night in the dreary wood, amongst the cold rocks where the serpents may glide and the toads intrude, where the thunder may crash above them, and wild winds shake their delicate petals. But they, in their innocent boldness, fear none of these things; though I think of these pets in some stormy midnight with a certain pang of sorrowful commiseration, and a fear that they will all be destroyed, yet when the radiant morning comes there they are smiling out unharmed, no matter what storms may have swept through the darkness. They certainly bear charmed lives, and blossom where they please, and endure a degree of hardness which one would think enough to annihilate such fragile-looking creations. We saw, the other day, a most charming combination of forms and colors as we stood looking down a rocky slope, across a meadow and a stream to woods beyond. All down upon the outer edges of the rock, flaunted the gay wild columbines, peeping over with a look of curiosity into the deeper fissures of the cliff, along which grew myriads of the delicate *Dicentra*, or squirrel-corn, fring-

ing with its fair blossoms and exquisitely cut leaves every crack and crevice, gathered into every seam and ruffling softly over the brink; while purple Hepaticas, and white Anemones, and the prettily growing bloodroot, glanced into sight in every imaginable place, and in the damp meadow below grew quantities of bright yellow cowslips and blue violets; and across the brook, in the thick wood beyond, the gay *Cornus-florida*, or flowering dogwood, was abroad with its snowy battalions, flashing through the dark foliage, and charming the eye with its level sheets of bloom. And these beautiful arrangements of colors we often find, where the very tints whose contrasts bring such a harmonious picture are grouped by nature's hand with unerring skill.

On the tops of many of these hills we find it very moist, and here in luxuriance grow the sweet white violets, and the spring-beauty, and the graceful adder's-tongue, and underlying these tinted clusterings of white, and pink, and buff, are mosses of varied shadings and wondrous fineness. I saw a host of adder's-tongue growing in a thick bed of trailing evergreen, and mingled with it the pretty *Mitchella* vines, or partridge-berry, with its round green leaves striped with white and the bright scarlet berries. Lower down, growing in abundance, we find the *Convallarias*, or Solomon's seal, of several varieties, and the *Uvularias*, the fair bellworts, or straw-lilies, as they are called, of the softest straw-color, and such a graceful hang of the "drooping flower-crowned head." These two species of straw-lilies growing so close beside one another, looking so much alike to the careless glance, and yet always to be distinguished the one from the other, — the *perfoliata* having the leaves perforated by the stem, and the *sessilifolia* with the

leaves growing free from the stem. Just so true are they always, and so are many others of the flowering tribes. It is wonderful to mark their faithfulness. For instance, such myriads of violets as there are, and violets are violets, one would think, and what can be the difference? You shall see if you will look. This one (*Viola-palustris*) is pale lilac with dark purple streaks; and of this (*Viola-villosa*) the petals are reddish blue and the leaves round; of another (*Viola-palmata*) the leaves are hand-shaped; another (*Viola-sagittata*) has purplish petals and arrow-shaped leaves; another (*Viola-rostrata*) is pale violet with a long spur; of another (*Viola-pedata*) two of the petals are lilac colored and velvety, the others blue, and the leaves divided like the claws of a bird's foot. And so with all the flowers where there are many members of the same family; there is some slight difference which gives them individuality. The botanical eye seizes upon these slight distinctions which escape the careless glance, and the botanical heart undoubtedly trusts to them, and "Nature never does betray the heart that loves her."

To be sure, when one thinks of the varieties of *Potentilla* perhaps, or of *Polygala*, and of that terrible "Composite Family," — those ranks on ranks of asters and golden-rod, all alike, as one may say, — it seems impossible to tell which is which; yet the patient searcher is at length rewarded by discovering the minute bract, the angled stem, the clasping leaf, the covered nectary, or the twisted stamen, some slight but unerring peculiarity which distinguishes this from all others, and he can forever after call by name his friend *Tetragonotheca-helianthoides*, or whatever its name may be. And here I suppose may be the reason why strict botanists regard

cultivated flowers with disapprobation of a certain kind. This cultivation interferes with the primitive type and makes dreadful confusion with leaves, stamens, pistils, and petals, and this is why cultivated flowers are so difficult to examine. We have found more than thirty flowers this month, a list of which I shall send you. We found the barberry in blossom the other day, a handsome shrub; the drooping sprays of pale yellow flowers hang gracefully from perfect rosettes of green leaves, and the stamens, lying spread out within the corolla, have a remarkable sensitiveness, springing violently to the centre of the flower if touched ever so lightly,—a pretty little experiment. And so farewell to the beautiful May, so rich in freshness and bloom.



FLOWERS OF MAY.

CLASS.	ORDER.	GENUS SPECIES.	COMMON NAME.
1.	1. Ranunculaceæ.	Atragene-Americana.	Purple clematis.
"	"	Anemone-cylindrica.	Plumed anemone.
"	"	Ranunculus-bulbosus.	Buttercups.
"	"	Trollius-laxus.	Globe flower.
"	"	Coptis-trifolia.	Goldthread.
"	2. Magnoliaceæ.	Liriodendron-tulipa.	Tulip-tree.
"	5. Berberidaceæ.	Berberis-vulgaris.	Barberry.
"	"	Podyphyllum-peltatum.	May-apple.
"	8. Nymphæaceæ.	Nuphar-advena.	Yellow pond-lily
"	12. Cruciferæ.	Dentaria-diphylla.	Pepper root.
"	15. Violaceæ.	Viola-rotundifolia.	Small yellow violet.
"	"	Viola-pubescens.	Large yellow violet.
"	"	Viola-lanceolata.	Lance-leaf violet.
"	"	Viola-primubefolia.	Primrose-leaf violet.
"	"	Viola-Selkirkii.	Long-spurred violet.
"	"	Viola-striata.	Pale violet.
"	16. Cistaceæ.	Hudsonia-ericoides.	Hudsonia.
"	21. Caryophyllaceæ.	Stellaria-media.	Chickweed.
"	"	Cerastium-vulgatum.	Mouse-ear chickw'd.
"	"	Cerastium-arvense.	Field chickweed.
"	22. Portulacaceæ.	Claytonia-Virginica.	Spring-beauty.
"	27. Oxalidaceæ.	Oxalis-violacea.	Violet wood-sorrel.
"	"	Oxalis-stricta.	Yellow wood-sorrel.
"	37. Polygalaceæ.	Polygala-Senega.	Seneca snake-root.
"	"	Polygala-paucifolia.	Fringed polygala.
"	39. Rosaceæ.	Geum-album.	White avens.
"	"	Geum-rivale.	Purple avens.
"	"	Cratægus-coccinea.	Scarlet fruited thorn
"	"	Cratægus-tomentosa.	Black thorn.
"	"	Pyrus-arbutifolia.	Chokeberry.
"	"	Amelanchier-Canadensis.	Shad-blossom.
"	50. Saxifragaceæ.	Saxifraga-Pennsylvanica.	Swamp saxifrage.
"	"	Mitella-diphylla.	Bishop's cap.
"	"	Mitella-nuda.	Mitre-wort.
"	52. Umbelliferæ.	Zizia-integerrima.	Yellow zizia.
"	"	Osmorrhiza-longistylus.	Sweet cicely.
"	54. Cornaceæ.	Cornus-florida.	Flowering dogwood.
"	"	Cornus-alternifolia.	Blue-fruited cornel.
"	"	Nyssa-multiflora.	Sour-gum tree.
"	55. Caprifoliaceæ.	Lonicera-parviflora.	Small honeysuckle.
"	"	Lonicera-ciliata.	Fly honeysuckle.
"	"	Lonicera-cerulea.	Mountain honeysuckle.
"	"	Sambucus-pubens.	Red-berried elder.
"	"	Viburnum-nudum.	Withe-rod.

FLOWERS OF MAY — *Continued.*

CLASS.	ORDER.	GENUS.	SPECIES.	COMMON NAME.
1.	55. Caprifoliaceæ.	Viburnum-	lentago.	Sweet viburnum.
"	"	Viburnum-	acerifolium.	Dock mackie.
"	"	Viburnum-	lantanoides.	Wayfaring tree.
"	56. Rubiaceæ.	Oldenlandia-	cærulea.	Innocence.
"	61. Campanulaceæ.	Specularia-	perfoliata.	Venus's looking-glass
"	62. Ericaceæ.	Gaylussacia-	frondosa.	Dangleberry.
"	"	Vaccinium-	stamineum.	Deerberry.
"	"	Chiogenes-	hispidula.	Ivory plum.
"	"	Epigea-	repens.	May-flower.
"	"	Leucothe-racemosa.		Andromeda.
"	"	Andromeda-	polifolia.	Sacred andromeda.
"	"	Andromeda-	Mariana.	Stagger bush.
"	"	Azalea-	nudiflora.	Purple azalea.
"	"	Rhodora-	Canadensis.	Pink rhodora.
"	64. Aquifoliaceæ.	Ilex-	verticillata.	Black alder.
"	"	Nemopantes-	Canadensis.	Mountain holly.
"	70. Primulaceæ.	Trientalis-	Americanum.	Star-flower.
"	"	Samolus-	valerandi.	Brookweed.
"	78. Borraginaceæ.	Myosotis-	palustris.	True forget-me-not
"	"	Myosotis	laxa.	Pale forget-me-not.
"	"	Myosotis-	arvensis.	
"	"	Myosotis-	verna.	
"	96. Santalaceæ.	Comandra-	umbellata.	Comandra.
"	104. Urticaceæ.	Morus-	rubra.	Red mulberry.
2.	119. Orchidaceæ.	Orchis-	spectabile.	Spring orchis.
"	"	Arethusa-	bulbosa.	Purple arethusa.
"	"	Corallorhiza-	odontorhiza.	Coral-root.
"	"	Aplectrum-	hyemale.	Putty-root.
"	125. Smilaceæ.	Trillium-	cernuum.	Nodding trillium.
"	"	Trillium-	erectum.	Purple trillium.
"	126. Liliaceæ.	Polygonatum-	biflorum.	Small Solomon's seal
"	"	Smilacina-	stellata.	False Solomon's seal
"	"	Smilacina-	trifolia.	Three-leaved S. seal.
"	"	Smilacina-	bifolia.	Two-leaved S. seal.
"	"	Erythronium-	Americanum.	Adder's-tongue.
"	127. Melanthaceæ.	Uvularia-	perfoliata.	Bellworts, or
"	"	Uvularia-	sessilifolia.	Straw-lilies.
"	"	Streptopus-	roseus.	Rosy twisted stalk.

JUNE 1.

This is the first of June, and never summer sun rose in more regal state. The clouds were amber, and purple, and gold; the mists on the hills were tinted with softest touches, the land was bathed in balm and fragrance, and all nature combined to welcome, with sweetest offerings, this queen of months. To-day we are expecting friends from the city, and the flower-vases are waiting for the finishing touches. I think I have rather slighted our garden flowers in my letters to you, partly because you are better acquainted with them than with wild ones, but chiefly because wild flowers have a particular and peculiar charm to those who study them botanically. It is almost impossible to examine botanically many of the garden flowers, so changed are they by cultivation; but the flowers of the forest are true to the primitive type. Only think of roses for instance, the beautiful roses, the "hundred leaved;" ninety-five of these are monstrosities, or stamens and pistils cultivated into petals; the single wild rose, with its five unpretending petals, is the true rose. So of the poppies, the fringed and doubled beyond counting, they are all made out of the simple, five-leaved poppy. But for looking at, these garden gems are satisfying, and in fragrance they rival their forest sisters.

Our garden flowers have given us exceeding pleasure, and we have tried various experiments in training and arranging them, and have been often rewarded by great results. Aunt Emily has trained a beautiful cherry-colored verbenas into a kind of *bush*, by drawing the branches up instead of allowing them to trail, and supporting them by a stick in the centre. In this way the gay blossoms are made to cover the spreading top, and

present an appearance so unusual, that persons riding by sometimes stop to inquire what new plant we have.

And our charming vines which hang so gracefully from suspended baskets between the pillars of the piazza, the delicate Coliseum ivy and bright blue *Lobelia*, and larger vines clambering to the chamber windows, and all the train of twining plants, *Maurandias*, cypress vines, morning-glories, sweet-peas, and *Nasturtiums*, these are all dear and delightful.

Then our tea-roses, and geraniums, and pinks, and pansies, these can never be imagined by a city dweller, for one must have the room which the country gives to develop these charmers in all their charmingness. A friend in Cuba sent Aunt Emily a collection of tropical flower seeds. These have been planted in a small oval beneath a tree, and are subjects of intense interest. Several have come up, and some lily-like leaves are two or three inches high; the seeds of the beautiful Spanish banner are growing well, and several others that we do not know. But it was rather late in the season when they came, and we fear they will not come to flowering during the summer. Then we fear that they will not survive being taken up, and we are anxious if the weather is chilly, or blowy, or anything but *tropical*, so that on the whole we do not know whether they give us most happiness or unhappiness. All we can do is to watch them tenderly and hope for the best. But Isabella calls me to go into the garden this beautiful first of June.

JUNE 10.

We are learning to distinguish the different bird-songs, and a friend who has been visiting us, has assisted us much by telling us what he has observed himself, and

what he has gathered from the observations of others. He says he has paid much attention to bird-music, and has collected a book full of bird songs. He says that we have double privileges in our place of abode. We are sufficiently civilized to be visited by the songsters which frequent the cultivated localities, birds of the gardens and orchards, such as the bluebird, robin, goldfinch, crimson finch, green linnet, song-sparrow, bobolink, golden oriole, and others. All these have a taste for human society, and build and sing in the vicinity of dwellings, in the plum-trees and the homelike, sociable apple-trees, and the tall pear-trees and cherry-trees, or in the grassy meadows, and the edges of woods around cultivated fields. But we are also sufficiently uncultivated to have the benefit of the sweet, serious songs of those birds which delight in the far away woods and dim forests, such as the wood sparrow, the golden-crowned thrush, the green warbler, red-start, yellow-throat, wood-thrush, veery, red mavis, and many others. All these join in that rich morning concert which swells around us, and he says that they have an evening concert also, only there are so many other sounds then, and the clatter of the world so much around us, that we do not notice it. I mean to listen for it. I think we can hear it if any one can, for we do not meddle much with the jar and jostle of life, and are ready at any hour to listen to any voice calling us from the dim old woods. One little bird, called the vesper-bird, sings an evening song at a time when most other birds are silent. Our visitor says also, that the solemn strains always *begin* the morning concert, and this is true; for in listening to them I have always noticed a wild, mysterious solemnity in the beginning, and by degrees lighter and gayer min-

strels join in, till finally the bobolink, that type of all merriment and nonsense, presumes to strike in with his merry gushes. He told us also of a little green warbler or greenlet, whose song has a plaintive, entreating sound, as imploring some patron saint, and the words which it seems to use, and which he says almost startle you by their distinctness when heard in the hushed woods, are, —

“Hear me, Saint Theresa!
Hear me, Saint Theresa!”

This may seem a stretch of imagination, but he says that a careful observer of the notes of birds, who has written very interestingly on the subject, has set these words to music, and describes the sound as “the plaintive note of the green warbler, who seems in supplicatory tones, very slowly uttered, to say, ‘Hear me, Saint Theresa,’ repeating the strain for ten minutes or longer, and it is one of those melodies which seem to belong exclusively to solitude. There is a plaintive expression in this musical petition that is apparent to all who hear it.” Helen and I have listened with all our ears for hours in the still woods, but alas, we have not yet heard it, with all our ability to make things sound as we wish.

Only think how enchanting it would be if we could entice one to build in the cool, overshadowing beech-tree, above our grotto; then how singularly appropriate would swell that tender, pensive song, “Hear me, Saint Theresa,” and what a thousand pities it seems that when there really is such a suitable bird, it should not be persuaded to fill that niche. Another interesting bird is the red mavis, that delights to sit on some tree in the edge of the wood while the farmer is planting his corn, and keep up, as it seems, a watch of his movements and an incessant sparkle of sweet song, always delightful,

and which sounds like this, "Drop it, drop it; cover it up, pull it up; see there, see there; work away; drop it, drop it; cover it up." The golden oriole is very abundant here, delighting to visit the apple-trees when in blossom; the pensile nest of one hangs swaying on the branch of a tall elm near my window, and these beautiful birds may be seen flashing through the foliage at almost any time. We saw, the other day, two splendid scarlet birds on the trees in front of the house, but they soon took flight for the woods; and that same afternoon, as we walked on the hills, we saw, flitting through the trees, the very same birds as we supposed, and a gay scarlet feather came floating down at our feet, which we have kept to remember these brilliant visitors by. On our way home we inquired of a farmer whom we met, what birds these were: he said he did not see them, but guessed they were what his boys called fire-hang-birds. But they were not, for that name is what boys call the orioles, from their bright colors and hanging nests. We have since learned that they were scarlet tanagers, brilliant birds which are sometimes seen here for a little while in the summer. Every evening, at about eight o'clock, a whip-poor-will begins his peculiar song in some quince bushes not far from the house. Strange, liquid, pensive sound, so clear, so wonderful in distinctness. This seems to be our only night-singing bird, unless one compliments the screech-owl by calling his screech a scream. "Dismal, boding owl," to be waked in the darkness of midnight by his appalling cry, is enough to frighten any one, and I felt glad that my ears were prepared beforehand, so that I knew what it was, otherwise I should surely have thought it a cry of human distress. It is a dreadful sound, and a lady was telling

us that she had heard it a few nights before, and in terror thought some child was lost in the ravine near their house. We inquired how it sounded, and immediately the lady's husband imitated the forlorn yell, for that is just what it is. Soon after I heard it in the "dead waste and middle of the night," and though it sounded sufficiently terrific, I rather enjoyed the unearthly hoot, trying to consider it another of those rural sounds which go to make up the entire harmony of nature. The cuckoo, too, calls out in the dim woods in the sultry summer forenoon, — a sound that captivates me always. I do not know what the association is that makes it so interesting, perhaps the pretty lines learned in early childhood, —

"Sweet bird, thy bower is ever green,
Thy sky is ever clear ;
Thou hast no sorrow in thy song,
No winter in thy year."

The cuckoo is very shy and seldom seen, and seems to shun human society. A farmer, an old gentleman of eighty, at a farm-house where we boarded one summer, told us one lovely morning that it was going to rain. "Going to rain, grandpa!" said one of the party: "what makes you think so? there is not a cloud to be seen." "Ah," said he, "don't you hear the cuckoos calling for rain? they never make a mistake." We then inquired about the cuckoo, how it looked. "I never saw one," said he; "I have lived here, boy and man, over eighty year, and I never caught sight of one; they are dreadful scared critters." Helen thinks she shall not live "eighty year" and never see a cuckoo.

Aunt Emily says that once when she was visiting a school-mate residing on Temple Street, Boston, some

cuckoos had a home in a tree at the corner of the street, and strangely enough those sounds, always associated with the most solitary woodland recesses, broke over the hum of the busy city. She and her friend used to sit at the window and listen to the mysterious call, which would cease when anything like bustle was near, breaking out when silence was restored. They must have had their trials in such a locality, and there was no accounting for their being there, unless they had escaped from a cage and had not found the way to the woods.

It pains me, Rose, to speak truthfully of the bewitching bobolink, with his merry song, so full, so sweet, so untiring. Such a stirring and respectable character as he is, too, in the northern and temperate regions where he begins life with somewhat limited means, requiring healthful exercise and effort on his part to take suitable care of his family. But he works for them early and late, and his dress is the "spick and span" of nicety, his black coat and white vest are above reproach, and his gay spirits overflow continually in a song brilliant, cheery, and unceasing. After awhile he takes wing for a softer climate where less effort is necessary. Now begins the downward course; he neglects his toilet, and grows rusty and dingy looking, stout and voracious; his clear, varied, and enchanting warble dies away, he becomes an epicure, and as the reed-bird of the Middle States, he finds no mercy at the sportsman's hand. Those who escape the "snare of the fowler" and travel still further south, reach those climes of luxuriant vegetation where the boundless feast forever spread tempts to continual indulgence. The epicure soon degenerates into the disgusting gourmand, the rice-bird of the Southern States, and finally winds up his career as the butter-bird of the West

Indies ; every accomplishment forgotten, — song, beauty, sentiment all gone, and become so dull and unwieldy by constant eating as to be easily knocked down by hand. O be warned by this melancholy history, free, airy, exultant, beautiful bobolink ; yield not to the temptations of an idle, self-indulgent life ; strive not to escape from that degree of wholesome effort, wherein lies thy only safety.

JUNE 20.

The tulip-trees are now in bloom. Beautiful and ornamental are they in every way ; the peculiar shape and fine glossy green of the leaves, and the soft, creamy, distinguished looking blossoms, make them objects of interest and admiration.

There are more flowers to be found this month than in any other in the year, and this is the sweetest of months. We have not been able to go out at all hours every day ; many have been quite too warm, but we have averaged about three new flowers daily, and we hate to think that the supply must soon be exhausted. There comes a time (we are told by those who know), in the later part of summer, when there are very few flowers to be found, everything is getting ready to go to seed, and what late flowers there are, with a few brilliant exceptions, are by no means as enchanting as the early comers.

We shall be away late in the season, but hope to be somewhere where we can look upon the cardinal flower, the fringed gentian and the summer flowering Orchis tribe. Among the flowers that we have particularly fancied this month, are the beautiful and fragrant *Pyrolas*, of which there are several varieties. These grow in damp and shady woods, and among them the *Pyrola-rotundi-*

folia is the handsomest, and is very sweet scented. The elegant Azaleas are charming alike for beauty and per-



Azalea-nudiflora.

fume, and the woods now seem lighted with their crowded bloom. These, with the Trillium, the wild

lupine, with forget-me-nots, evening primrose, Bethlehem stars, blue flag, wild ginger, arrow-head, yellow lilies, blue-eyed grass, ladies'-slipper, laurels, and the splendid white water-lilies, can be arranged in bouquets equaling, in grace and fragrance, the garden pets. The pretty wild touch-me-not is a curious little tawny yellow spotted flower. The blossoms are shaped like fairy little pitchers hanging on slender stems, and the seed-vessels, when ripe, burst with an elastic spring and a little explosive sound, delightful to all youthful wood-wanderers. The wild morning-glory grows luxuriantly over old fences, and everything it can find to cling to. A beautifully graceful one has crept up the posts of an old gateway between two fields, twining into all the cracks and crevices, and the fair white and pink blossoms look lovely, peeping out from two knot-holes through which they have made their way. These flowers shut up at midday, and are in perfection in the early glow of the summer morning; the buds, however, are perfect at all hours. The blue-bell hangs over the points of the rocks, and seems to grow where there is not an atom of earth worth mentioning. This flower is called the *Campanula-rotundifolia*, but the green leaves which we see are slender lines, and it is only when you look very sharp at the very groundwork of the plant that you discover some small round root-leaves, so that it seems absurd to name the plant from this almost invisible appendage. The flower is grace itself, and we supposed it was of course the harebell of the poets, that which

" raised its head,
Elastic from the airy tread "

of our friend Ellen Douglas; but a writer on plants says that Ellen Douglas's harebell, which abounds in the

woods and glens of Scotland, belongs to the genus *Scilla*, and grows from a bulb, which is very unlike ours.

I have, I think, told you of no plants which have not beauty, grace, fragrance, or some sweet attribute to make them dear to the heart, but there are some which are des-



Monotropa-uniflora.

titute of all these, and are noxious and injurious only, and in this forbidding class the *Rhus-radicans*, or poison ivy, must take its place. This plant, I am sorry to say, is very fond of this part of the country. One very large one which has climbed to the very top of a tall, dead

tree in a damp, dark hollow in the woods, looks really wicked, even when one does not know what it is. The vine sends out lateral roots which generally bury themselves in the bark of the tree to which they cling, but in this instance these roots have become detached for the whole height of the tree, excepting at the very top, and the huge vine, about the size of your arm and thickly bristling with these black, hairy roots, sways with a sharp creak from side to side, and is really fearful in its aspect. The place where it grows is the most desolate and forlorn of any spot we have seen in our walks, — a black, muddy hollow, from whence all fresh and healthful verdure has fled, leaving the premises to what you can hardly believe is not an immense hissing serpent with thousands of legs. This ivy and also the handsome, shiny sumach, a friendly farmer advised us not to touch, as they were “dreadful pisen to some,” he said. Nothing pisen us, however, we are glad to find, but we feel no inclination to touch this snaky-looking thing, as snakes are our peculiar horror; and here I may as well say that our dread of these reptiles, great at first, is passing away, as we have seen only one, and a gentleman who has lived near here for ten years says he has never seen one, though he ranges the woods extensively. I must not forget to mention the *Monotropa-uniflora*, or Indian pipe, or ghost-flower, as some call it. This is a singular plant of tawny, waxen white, with not a tinge of green from head to foot. The flower is bell-shaped, and the leaves and stems and all are partially transparent and of this disagreeable whiteness. It is so strange to find a plant with no touch of verdure about it, that one is tempted to pick it for the curiosity of the thing, though unearthly-looking, like a small ghost,

haunting the solitudes. We have found some of these of a pinkish hue, but this does not improve them. These are parasitic plants, or growing upon the stems or roots of other plants, and of this family I shall tell you more by and by. Though they are curiosities they are not favorites; there is something unnatural in their manner of growth, and they have not the sweet touch of the woods about them.

This little ghost-plant grows abundantly in a shady, damp grove which we often pass; the trees there are so thick that it is always dark, and the ground is covered with decaying leaves, and here you may see a whole colony of these shadowy looking phantoms. They are not shadows, however, nor phantoms when you touch them, but cold, fleshy, clammy, disagreeable things. They would seem to be out of place amidst the beautiful fresh verdure of June, if anything which nature produces can seem out of place to the pilgrims who seek her shrine.

JUNE 24.

Our grotto is not forgotten amidst the wealth of buds and blossoms. Rough rocks form the front, and from the wild vines on the hills we have selected those desirable for beauty of foliage, or flower, or fruit, or brilliant autumnal tint, such as the graceful woodbine (*Ampelopsis-quinquefolia*), the wax-work (*Celastrus-scandens*), which is a fine vine, and the scarlet berries remain all winter. It belongs to the same family as the burning bush, and resembles it somewhat. One pretty vine with soft, bluish-green, grape-like leaves, is the moonseed (*Menispermum-Canadense*), the fruit of which in the autumn looks like little frost-grapes, and the seeds are crescents, like little new moons. These vines

grow finely in this luxuriant soil, and some large ones which we transplanted are twined around our rustic porch, and already hang in streamers over the entrance, and all the rock work will soon be mantled with the verdant covering.

Within, there is a soft light, sufficiently weird and uncertain to suit even *our* romantic notions. It glances satisfactorily on "Cross and character and talisman," and glimmers and shimmers with that captivating grace which light glancing through trembling leaves is wont to assume. We think our grotto charming, with its overhanging beech, its climbing vines, its mosses and ferns its rocks dripping with frequent showers, — for rocks and verdure are sprinkled liberally by faithful hands, and everything is kept in the very nicest order. Isabella, Helen, and I, spend many a delightful hour at the grotto, it is a very convenient resting-place for the strollers on the hills, and we are often visited by other members of the family, and whenever any of us are within, White-toes mounts guard near the door, and never deserts his post while one of us remains. Here we keep in a niche our baskets, trowels, botanical boxes, canes, and other implements for excursions on the hills, and when we begin to prepare at the house for one of these strolls, White-toes starts off ahead, and when we reach the grotto, there he stands waiting for us, generally with one of our baskets between his teeth. Every one considers our hermitage a great success, and the beauty of it is, that, like a cathedral, it does not *finish* at once, but can be continually added to and improved. We have some brilliant improvements in our imaginations, and time only can show whether they will be anything more than imaginations. At present, every pretty stone, or shell, or

piece of moss, or graceful fern, is transported to this rural retreat to become an inhabitant and an ornament.

JUNE 27.

The season is in its perfect prime. The woods are filled with their own wood-perfume. Who has not met it when entering these warm, dusky forest paths? — this subtle and exquisite odor that nature only knows how to prepare, and keeps, not bottled up with a tight stopper, but floating free on the light wings of every summer breeze, — this “scent of the woods,” so delicious, so exhilarating; no one can tell what it is like; there are touches of all sweet fragrance in it. It must be Nature’s wonderful elaboration of aroma, prepared expressly for her vernal darlings, wherein is enshrined all rare and delicate odors, which are to go — this to the heart of the sweet, white violet, and this, in its unequaled delicacy to the clusters of *Epigea* buried beneath old leaves in the dark pine groves; this to the tinted bells of the graceful *Linnæa*, and the showering apple-blossoms; this to the fragrant birch leaves, and the aromatic sassafras, and boxberry, and sweet-fern, and the balsamic pines and spruces, and the tribes of mint and balm; this to the queenly water-lily, and the superb white lily, and the children’s darlings, the spring’s sweet lilacs; and this for the beloved of all, the roses, the unrivaled roses; this for the soft breath of sunny heliotropes and regal orange-blossoms, for genteel, spicy pinks, and those treasures of delicious fragrance, the rose-geranium, lemon-verbena, and sweet-brier leaves, for gorgeous magnolias, tuberoses, and jessamines, for violets, lilies of the valley, and mignonne; and so of many more which I would not slight, but to enumerate them all would fill volumes, but they

are dear to all hearts, whether growing wild in the shaded forest, or trained in the sunny garden, or inhaling their fragrance from languid tropical airs, or finding it in the breezy freshness of "iced mountain tops." To all of these myriads of flowers, and leaves, and stems, and roots even, is floating the sweet incense; and the charmed cup, the "balm of a thousand flowers," is offered to each floral lip, and every graceful petal selects, with unerring accuracy, the very combination it needs for its own sweet uses.

JUNE 30.

"June, the month of leaves and roses," the acme and perfection of months, the glowing, central sparkle in the summer's mantling cup, — alas, that it has flown with its delicious, dewy mornings, its long, long days, cloudless or adorned with great masses of clustering clouds which know how to darken into thunderous gloom, pouring the refreshing shower upon the expecting verdure, and then melting away into gorgeous sunsets and the glimmer of summer twilights. How can we bear to part with June, the very poem of the season, the month when the foliage everywhere is filled, and rounded, and perfect; such depth of shadow, such masses of sunshine, not a faded leaf to be found. It has gone, with its sunlight and music and moonlight — the "summer moon" which began with the month, the slender crescent "with the old moon in its arms," which brightened nightly until it looked through leafy woods upon mountain streams with the full amount of romance accorded by the poets. We must lament for June. What can the fervid July or the sultry August bring us to atone for this lost treasure!

FLOWERS OF JUNE.

CLASS.	ORDER.	GENUS.	SPECIES.	COMMON NAME.
1.	1. Ranunculaceæ.	Anemone-Virginiana.		Tall anemone.
"	"	Anemone-Pennsylvanica.		White anemone.
"	"	Thalictrum-cornuti.		Meadow rue.
"	"	Ranunculus-aquatilis.		White crowfoot.
"	"	Ranunculus-Purshii.		Yellow crowfoot.
"	"	Ranunculus-recurvatus.		Hooked crowfoot.
"	"	Ranunculus-acris.		Tall buttercups.
"	4. Menispermaceæ.	Menispermum-Canadense.		Moonseed.
"	6. Nelumbiaceæ.	Nelumbium-luteum.		Sacred bean.
"	8. Nymphæaceæ.	Nymphæa-odorata.		White water-lily.
"	"	Nuphar-advena.		Yellow pond-lily.
"	9. Sarraceniaceæ.	Sarracenia-purpurea.		Pitcher-plant.
"	11. Fumariaceæ.	Corydalis-aurea.		Golden corydalis.
"	"	Corydalis-glaucia.		Pale corydalis.
"	12. Cruciferæ.	Cardamine-rhomboidea.		Spring cress.
"	"	Cardamine-hirsuta.		Bitter cress.
"	"	Arabis-hirsuta.		Rock cress.
"	"	Turritis-glabra.		Tower mustard.
"	15. Violaceæ.	Viola-rostrata.		Long-spurred violet.
"	"	Viola-Canadensis.		Canada violet.
"	"	Viola-Muhlenbergii.		Dog violet.
"	16. Cistaceæ.	Helianthemum-Canadense.		Rock rose.
"	"	Hudsonia-tomentosa.		Downy Hudsonia.
"	17. Droseraceæ.	Drosera-longifolia.		Sundew.
"	19. Hypericaceæ.	Hypericum-perforatum.		St. John's wort.
"	"	Hypericum-Canadense.		Copper-colored hypericum.
"	"	Hypericum-Sarothra.		Orange grass.
"	21. Caryophyllaceæ.	Silene-Pennsylvanica.		Wild pink.
"	"	Silene-antirrhina.		Sleepy catchfly.
"	"	Arenaria-serpyllifolia.		White sandwort.
"	"	Stellaria-borealis.		Northern chickweed.
"	"	Mollugo-verticillata.		Indian chickweed.
"	23. Malvaceæ.	Malva-rotundifolia.		Mallow.
"	26. Linaceæ.	Linum-Virginianum.		Wild flax.
"	27. Oxalidaceæ.	Oxalis-acetosella.		White wood-sorrel.
"	28. Geraniaceæ.	Geranium-Robertianum.		Herb Robert.
"	29. Balsaminaceæ.	Impatiens-fulva.		Spotted touch-me-not.
"	32. Anachardiaceæ.	Rhus-typhina.		Stag-horn sumach.
"	"	Rhus-glabra.		Smooth sumach.
"	"	Rhus-venenata.		Poison sumach.
"	"	Rhus-toxicodendron.		Poison ivy.
"	35. Celastraceæ.	Celastrus-scandens.		Waxwork.

FLOWERS OF JUNE—*Continued.*

CLASS.	ORDER.	GENUS. SPECIES.	COMMON NAME.
1.	36. Sapindaceæ.	Staphylea-trifolia.	Bladder-nut.
"	38. Leguminosæ.	Lupinus-perennis.	Wild lupine.
"	"	Trephrosia-Virginiana.	Hoary pea.
"	"	Baptisia-tinctoria.	Wild indigo.
"	39. Rosaceæ.	Spiræa-opulifolia.	Nine bark.
"	"	Potentilla-argentea.	Silvery cinquefoil.
"	"	Potentilla-anserina.	Marsh cinquefoil.
"	"	Potentilla-fruticosa.	Shrubby cinquefoil.
"	"	Potentilla-tridentata.	White potentilla.
"	"	Potentilla-palustris.	Purple potentilla.
"	"	Rubus-odoratus.	Flowering raspberry.
"	"	Rosa-Carolina.	Swamp rose.
"	"	Rosa-lucida.	Dwarf wild-rose.
"	"	Rosa-blanda.	Wood-rose.
"	"	Rosa-rubiginosa.	Sweet-brier.
"	"	Rosa-micrantha.	Small sweet-brier.
"	43. Onagraceæ.	Oenothera-biennis.	Evening primrose.
"	"	Oenothera-pumila.	Small evening prim-rose.
"	45. Cactaceæ.	Opuntia-vulgaris.	Prickly pear.
"	50. Saxifragaceæ.	Heuchera-Americana.	Alum-root.
"	52. Umbelliferæ.	Sanicula-Canadensis.	Sanicle.
"	"	Archangelica-atropurpurea.	Great angelica.
"	53. Araliaceæ.	Aralia-hispida.	Wild elder.
"	"	Aralia-nudicanlus.	Wild sarsaparilla.
"	54. Cornaceæ.	Cornus-Canadensis.	Bunchberry.
"	"	Cornus-circinata.	Round-leaved cornel.
"	"	Cornus-sericea.	Silky cornel.
"	"	Cornus-stolonifera.	Red cornel.
"	"	Cornus-paniculata.	Gray cornel.
"	55. Caprifoliaceæ.	Linnæa-borealis.	Twine-flower.
"	"	Diervilla-trifida.	Bush honeysuckle.
"	"	Triosteum-perfoliatum.	Feverwort.
"	"	Sambucus-Canadensis.	Elder.
"	"	Viburnum dentatum.	Arrow-wood.
"	56. Rubiaceæ.	Galium-lanceolatum.	Wild liquorice.
"	"	Mitchella-repens.	Partridge-berry.
"	60. Lobeliaceæ.	Lobelia-inflata.	Indian tobacco.
"	61. Campanulaceæ.	Campanula-rotundifolia.	Harebell.
"	62. Ericaceæ.	Andromeda-ligustrina.	Small andromeda.
"	"	Kalmia-latifolia.	Mountain laurel.
"	"	Kalmia-angustifolia.	Lambkill.
"	"	Azalea-viscosa.	White swamp hon-ey-suckle.

FLOWERS OF JUNE—*Continued.*

CLASS.	ORDER.	GENUS. SPECIES.	COMMON NAME.
1.	62. Ericaceæ.	Ledum-latifolium.	Labrador tea.
"	"	Pyrola-rotundifolia.	Fragrant pyrola.
"	"	Pyrola-elliptica.	Shin leaf.
"	"	Pyrola-chlorantha.	Small pyrola.
"	"	Moneses-uniflora.	Rose-colored pyrola.
"	"	Chimaphila-umbellata.	Prince's pine.
"	"	Chimaphila-maculata.	Spotted wintergreen
"	64. Aquifoliaceæ.	Ilex-opaca.	American holly.
"	"	Ilex-lævigata.	Winter-berry.
"	"	Ilex-glabra.	Ink berry.
"	70. Primulaceæ.	Lysimachia-stricta.	Loose-strife.
"	"	Anagallis-arvensis.	Scarlet pimpernel.
"	73. Orobanchaceæ.	Conopholis-Americana.	Cancer-root.
"	74. Scrophulariaceæ.	Verbascum-thaspus.	Mullein.
"	"	Verbascum-blattaria.	Moth mullein.
"	"	Castilleja-coccinea.	Scarlet painted cup.
"	78. Boraginaceæ.	Symphatum-officinale.	Comfrey.
"	"	Myosotis-verna.	White forget-me-not
"	"	Lithospermum-arvense.	Gromwell.
"	"	Cynoglossum-Virginicum.	False comfrey.
"	81. Convolvulaceæ.	Ipomea-pandurata.	Wild potato vine.
"	"	Convolvulus-arvensis.	Bindweed.
"	"	Cuscuta-epilinum.	Dodder.
"	82. Solanaceæ.	Solanum-Carolinense.	Nightshade.
"	85. Asclepiadaceæ.	Asclepias-quadrifolia.	Pink silkweed.
2.	112. Araceæ.	Calla-palustris.	Water arum.
"	119. Orchidaceæ.	Platanthera-obtusata.	Dwarf orchis.
"	"	Platanthera-Hookeri.	Two-leaved orchis.
"	"	Platanthera-bracteata.	Green orchis.
"	"	Platanthera-hyperborea.	Northern orchis.
"	"	Platanthera-fimbriata.	Purple fringed orchis.
"	"	Spiranthes-latifolia.	Ladies' tresses.
"	"	Pogonia-ophioglossoides.	Purple arethusa.
"	"	Cypripedium-pubescens.	Large yellow ladies'-slipper.
"	"	Cypripedium-parviflorum.	Smaller ladies'-slipper.
"	123. Iridaceæ.	Iris-versicolor.	Blue flag.
"	"	Sisyrinchium-Bermudiana.	Blue-eyed grass.
"	125. Smilacææ.	Trillium-grandiflorum.	White trillium.
"	"	Trillium-erythrocarpum.	Painted trillium.
"	"	Lilium-Philadelphicum.	Wild red lily.
"	"	Lilium-Canadense.	Wild yellow lily.

JULY 5.

“’Tis now the prime of summer time,” and though the middle of the day is often overpowering in its heat, the delicious mornings and evenings are charming beyond description, and we have been tempted to prolong our strolls in these golden midsummer twilights until starlight and moonlight added their peculiar charms to the shaded landscape. But yesterday a rumor of something terrific seemed likely to put an end to grotto visiting and woodland wandering.

While we were at breakfast, John appeared at the door with terror on his honest face, to report to “the Master,” that a man passing by in the early morning had seen a *Catamount* climbing an old tree that stands by the brook, and disappearing in a large hole in the trunk, from which he heard strange mewings, and supposed the young ones were in there, — indeed he had seen a wild-looking black head popping out before the old one went in! O dear, only to think of it! A wild-cat, a catamount, to spring down upon our heads as we strolled thoughtlessly under the trees. And how we had ranged those hills and woods ever since we came here, with no thought of wild-cat or wild beast of any kind; how we had loitered in that grotto till the dusky twilight was deepening into evening, and what if one of these prowling wretches had pounced upon us in our lingering saunter homewards! It was indeed frightful to think of the risks which we had run, and now — what was to be done? Father said it could not be true; it was not possible that any of these wild creatures inhabited these hills so near to residences, and so much frequented; there must be some mistake.

However, the story was resolutely “stood to” by the

reporters, and as Father had to go in town as soon as breakfast was over, he told us we had better not go to the woods till he returned, when he would investigate matters. John was really afraid to go to the stable for the horse, and took the liberty (as we learned later in the day) to advise Father to forbid the ladies to "set a foot out-of-doors" until his return from town in the afternoon. He had to hurry off, however, without time for any more instructions, and no sooner had he gone than Helen, who has a more extensive acquaintance with the inhabitants of the fastnesses than any of us, declared that she did not believe one word of this story. She said John was afraid of his own shadow, and as he had a few days before mistaken a clumsy tortoise of the size of his fist for a *snake*, she did not think his opinion worth much in questions of natural history. She said she believed that this terrific animal was nothing worse than a kind of wild *tame* cat that she had often seen scudding across the fields, and had treated to cups of milk many a time; at any rate, there could be no harm in calling "pussy, pussy," at a safe distance. So she walked out a little way, while we stood on the piazza, for the terrible tree, which stands with others at the edge of a ravine, is but a short distance from the house. She began, in a low, confidential tone, the familiar call of "pussy, pussy," and to be sure, in a few moments out popped one head, then another, then a third, and there was such a clamorous mewing, that Aunt Emily said she thought both John and the early traveller were justified in feeling alarmed, if the mew of a kitten was a new sound to them. Then Helen threw some tempting bait towards the tree, and we waited the result. Presently out crept *an old cat* that we both had often seen,

but which I had never fancied, because she was black, and wild, and not at all pretty. But Helen, who bestows her affections upon every animal she sees, had patronized and fed this unpromising specimen, and tried with unavailing cares to reclaim her from her vagrant ways, so that they were somewhat acquainted, and there was a friendly feeling between them. So out she came, and then her kittens three, and then we called John to see the catamounts eat breakfast, and he looked wonderingly on, and said, "Ah, Miss Helen, but you're a wise one."

JULY 15.

I send you to-day a drawing of a remarkable member of the floral family; the botanical name is *Sarracenia-purpurea*; the common names are pitcher-plant, side-saddle flower and hunter's cup. It is called an aquatic plant, but is not strictly that, as it does not always grow in water, though preferring wet and boggy places. There are hundreds growing in an extensive swamp which we often pass in riding, but we cannot get them there, though sometimes we have an attendant who is enterprising enough to brave the mud and water which must be forded before they can be reached. It is true that we find them in more accessible spots, but none to compare with those which come from this dismal swamp. It is a surprising plant, the evergreen leaves being hollow, little pitchers in fact, with an extension at the top forming a sort of lid. The flower is also very peculiar; it is large and of greenish yellow and purplish colors, with the petals curving over toward the style, and the short style expanded into a little five-pointed umbrella, sheltering the stamens beneath it, each point turned under in a queer little hook. These little pitchers hold

about as much as a wine-glass, and are always found with water in them, though it may not have rained for weeks; this gives the name of hunter's cup; but from the fact that bugs and little spiders and other insects are always found drowned in this water, I think a hunter must be at the last gasp before he could appropriate it. It is said that monkeys, in monkey-countries, know how to get a drink from these natural drinking-cups, and even to lift the lids which carefully cover some of them. There are but few plants of this family in North America. One is found in the Southern States, with long, drooping yellow petals, and one in California. These are all curious and interesting, but some that are brought from tropical climates, far exceed in wonderfulness those of our own country. They are called *Nepenthes* or pitcher-plants, and differ in many respects from those already mentioned. The *Nepenthes-distillatoria* was brought first from China, and it was supposed to grow only there. Later, however, the same species have been found in Madagascar, and many

*Nepenthes-distillatoria.*

other varieties have been brought from Ceylon, Bengal, and Borneo. One very beautiful one grows in New Holland, where the pitchers, of graceful shape, are ornamented with red and purple stripes. The accounts of these plants are so interesting to me, that I must tell you some things which I have learned about them. The *Nepenthes* of tropical climates are all evergreen climbers, of elegant habit of growth, and very ornamental. Some of these run upon trees to the height of twenty or thirty feet. The manner of growth is remarkable; the leaf, as it opens at first, gives no sign of a pitcher, except in a curling tendril at the point. This tendril lengthens, and a small enlargement at the end gradually increases and turns upward, and at length grows into the size and form of a most captivating little pitcher, swinging lightly on the slender tendril, and covered with an exactly fitting lid, and raising this lid, you see the mysterious vase filled with clear, pure water. How came it there? This pitcher hangs suspended on the stalk six inches or a foot from the point of the leaf to which it is attached. On one plant you will sometimes see forty or fifty pitchers. The flowers of these plants are small and unattractive, but the plants are full of interest. In the *Nepenthes-distillatoria*, the pitchers are five or six inches long, graceful and symmetrical as the classic models of antique vases: the lid circular and about an inch in diameter; the color, a rich soft yellow, shaded with red or purple; the evergreen leaves are delicately shaped, and the tendrils, connecting the pitcher with the leaf, have a graceful way of curling into rings like the tendrils of grape vines. One fine species which is called the *Nepenthes-Rafflesiana*, produces the largest and most elegant pitchers of any

cultivated in Europe; the acute linear leaves are eighteen inches long, and the tendrils about the same length; the pitcher is six inches deep, and two or three inches in diameter; the edge into which the lid shuts is ornamented with a broad rim of brown and purple, and the whole of the outside of pitcher and lid is mottled and spotted with deep crimson and purple; the leaves are beautifully green and shining, and the whole thing attractive and wonderful. The *Sarracenia*s of North America would seem sufficiently curious and interesting if these tropical ones did not go so far beyond them; but these, in their turn, are cast into the shade by some gorgeous ones very recently discovered in the mountains of Borneo, which in size and splendor surpass anything previously seen or imagined. Pitchers large enough to hold the cream for a good sized family breakfast, twelve inches deep, and four or five in diameter; around the edge at the top is a brilliant ring, an inch and a half wide, gracefully rolled over upon the unique pitcher, the gay and beautiful coloring of which is astonishing. How delightful it must be to sail away to those wondrous climes, where Nature spends herself in getting up these remarkable productions; and then to climb those tropical mountains where a succession of all temperatures brings to life the plants suited to all climes, where Nature has had so many centuries to work undisturbed, as one may say, that amazing results are brought to pass.

I am reminded here of a beautiful curiosity which has been introduced recently into this country, the lace-leaf plant, as it is called. It is a native of Madagascar, and has been cultivated in Europe but a few years. The plant is entirely aquatic, taking root in the mud at the

bottom of streams, the leaves being always under water, but the flower-stalk reaching the surface and the blossom expanding above water. This species is the *Ouvirandra-fenestralis*, and its peculiarity consists in the wonderful structure of the leaves; they are of a vivid and beautiful green, and wholly composed of the most slender fibres in a delicate reticulation, resembling emerald network or lace, or open needle-work. Fragile as these leaves appear, like a gossamer web, they yet possess a flexible strength which allows them to be lifted by the hand, and examined, and subjected to tolerably rough usage without injury. This rarity has already given a hint to the artificial flower makers, and the net-work artificial leaves are imitations of this remarkable production.

Another species with pretty rose-colored flowers is also under cultivation, and it is found that these plants thrive well in large glass jars partly filled with water, and a small quantity of earth deposited upon the bottom for the roots.

JULY 25.

If you wish to see quantities of elegant and fairy-like humming-birds, you should be here on these sunny summer forenoons. They come in swarms, all of a flutter, humming and glancing about the fragrant blossoms of the honeysuckle, and then away they go, nobody can tell where, for they go as they came, like a flash, but it is only for a few moments; then back they come again, for the honeysuckle bushes are delightful to them. By standing very still under the sprays, one can have the pleasure of having them flutter almost into one's mouth, for they do not seem to know that any one is around, and fly and dart here and there and everywhere.

If I only had the faith I once had in the salt-throwing legend, this would be a splendid field for experimenting. The other day several came, all of a buzz, to examine some plants which were setting in one of the open windows of the parlor, and though I was reading in a chair close to these flowers, they did not mind me at all; they stayed as long as they pleased and came back several times. They are bewitchingly beautiful, with their changing colors and perfect grace, and being all in a flurry, which is so damaging to beauties in general, seems only to increase their charms. Their nests are the most lovely little contrivances, so small that they look like pretty playthings, but so elegantly finished and so comfortably lined with the soft, cinnamon-fern wool, that you see they are designed for use as well as ornament. The gorgeous butterflies also sail in the brilliant light, and open and shut their wonderful wings for our delighted eyes, and in these glowing midsummer nights the nocturnal moths dash through the pillars of the piazza and wheel around the flowers. Moths! I at least, never dreamed of such a thing as a splendid moth before I came here to live. I never knew exactly what they were, but thought of them as a kind of mysterious horror, "fretting garments," and taking the hue of what they fed upon. But these with their superb wings can have no fellowship with such mysterious horrors; they may be related scientifically, but I do not believe they acknowledge the relationship. Sometimes in the woods we find these nocturnal moths stowed away under large leaves, fast asleep apparently, and waiting for their hour of dusky awaking. I found one the other day of a delicate buff color, with a black cross clearly and beautifully defined upon its wings. A boy living near us, has made

a large collection of such as are found in this vicinity. I told him I should hate to kill them; he said he did not kill them, he only gave them a dose of chloroform and then pinned them into his cases. He also introduced us to the beauty of the humming-birds' nests, and these he said he found, but both Helen and I think he would not mind taking them from the little birds themselves. He advanced the doctrine that one must kill a great many things if one wished to learn anything; and this sentiment not meeting with much favor from us, he politely remarked that this was the reason girls did not know anything; they would not kill insects, and were afraid of bugs and worms. He seemed to feel quite a contempt for the sex. The other night a perfect drove of *something* came dashing at the latest touch of twilight around some brilliant scarlet flowers in the yard. Seeing in the dim light these flying objects, and hearing a great buzzing, we hurried to the scene of action, and to our excited fancies there seemed a great swarm of humming-birds, but one of the party pronounced them nocturnal moths, and they probably could see, in this dusky light, the brilliant colors of the flowers. They really looked as large as humming-birds.

JULY 29.

Although more flowers are found in June than in any other month, July has a fair amount to offer, and some are very showy, even magnificent. Just now the hedges; and the shrubs along the streams, are adorned with the luxuriant wild clematis, which runs over everything, its pretty white blossoms gleaming out among the green. Later in the season, the seed-vessels of this vine have long plummy silken tails growing very thickly, and of a silvery gray color, and this is called "Old man's beard,"

and looks decidedly like that venerable appendage, for we have a branch which we kept all winter.

The *Epilobium*, or willow-herb, with its mingling of soft shades of light and dark lilac, the *Spireas* with racemes of purple and white flowers, and the many varieties of silkweed or milkweed, are very ornamental. We have found two species of silkweed which are beauties, the *tuberosa* with brilliant orange flowers, and the delicate *quadrifolia* with pale pink flowers in graceful umbels. The bladder-campion we also find this month, — a singular flower, the fragile white petals cleft more than half way down, so as to look still more fragile, and the inflated calyx of pale green, elegantly veined with purple. The wild ginger is interesting and rather rare. You find two round shining green leaves of velvety softness on slender stems, and between these, the solitary blossom, growing so close to the ground as sometimes to be partly hidden by the soil; yet it is worthy of being carefully extracted and examined, for it is quite unlike any other flower: the color is a somewhat lurid purplish brown, and the thick bell-shaped corolla is deeply divided into three acute segments. One of the charming *Arethusa* family which grows in the damp meadows is the *Calopogon-pulchellus*, in botanical phrase, the grass-pink its common name. Early in the spring its pretty little cousin, *Arethusa-bulbosa*, came with the vernal hours, its fair solitary flower very graceful and bright; but this more brilliant variety has six or eight large, rose-purple, sweet-scented blossoms on the stem, and the expanded lip of the flower is crested with a fringe of purple, orange, and white. The lovely little blue forget-me-not is abundant, and the gay orange lily, and the pale yellow lily, are noticeable in all the fields. The pretty wild-

roses are now in perfection, and the sweet-brier, or eglantine, as the poets call it, is worthy of its graceful name, and the exquisite fragrance of its flowers, leaves, and stems floats on the languid July breeze. The evening primrose is fragrant also, and this is a nocturnal flower, saluting, as it seems, the setting sun; for then, just at sunset, the buds which have been shut all day, suddenly burst wide open as the long calyx leaves spring back to the stem. Some botanical writers say that these "spring back with a loud popping noise," but this we have not heard. It is but just, however, to say that these flowers grow far off in the distant fields, so that we should not be likely to hear these sunset guns if they really are fired. The flowering raspberry is very handsome, both in leaf and flower, the dark crimson blossoms looking much like a wild rose, and the buds more beautiful if possible than rose-buds. The scarlet pimpernel is a dear little flower, and interesting, because so intelligent in regard to the weather, never opening its eyes if it is going to rain, or even be very damp; but if it is to be a fine day, it spreads wide its tiny scarlet corolla at eight o'clock in the morning, and looks out upon the sunshine until two in the afternoon. A pretty species of mullein we also find,—not the common yellow, growing by desolate road-sides, where everything looks dusty and forlorn, and the mullein stalks forlornest of all,—but the moth mullein, as it is called, with soft, creamy-white flowers shaded with purple, and the slender filaments all curiously bearded with the softest violet wool. The mountain laurel is now abundant,—a fine shrub with evergreen glossy leaves, and a profusion of showy clusters of light and dark rose-color fading into white. We have not found the *Rhododendron*, or rose-bay, though we hope to,

as we hear it grows a few miles from here. We have had a branch given us by a friend, and I wish you could see the superb flower. The green leaves are six or eight inches long, a shining evergreen, and from the midst of a tuft of these come out the fifteen or twenty gorgeous blossoms, several inches in length and two or three in diameter, of the softest pink or pale rose-color, or white with purple dots inside, and a touch of tender green that is enchanting. Nothing more splendid can be found in cultivation than this magnificent wild-wood shrub, which chooses for its home those secluded water-courses in mountainous regions where the intruding foot or hand seldom penetrate.

JULY 31.

We could not bear to say farewell to June, nor do we falter in our allegiance to this queen of verdure and of flowers. But July is no unfitting successor. Kept within doors often by the fervid heat, we have found the languid noons, with their continuous summer hum, brought their own deliciousness. July is indeed splendid, glorious; the sun is tropical in its heat, but the trees throw dense shadows, great black spots on the hot grass, and the scent of new-mown hay fills the sultry air with fragrance. The grand thunder-storms roll up hurriedly, and the mowers and reapers in the meadows below have had to "run for it" more than once. The portentous silence, the unnatural darkness fill the spirit with awe; we can hardly breathe, we almost long for the thunder peal to break the appalling stillness. And it comes, — crashing through the inky clouds with lightning and hail, and the down-pouring of the sheeted rain. A few moments of plunging drops flooding the garden paths and tumbling headlong from the choked water-spouts,

and the darkness passes away and the sun looks through the great drops, and that delicious *ground-smell* that comes after summer thunder-gusts, floats in on the fresh and elastic breeze. The sultry and oppressive atmosphere has given place to a delightful coolness and clearness; not a speck of dust is left on the rejoicing verdure. July is beautiful in its season and so, we doubt not, will be midsummer August.



FLOWERS OF JULY.

CLASS.	ORDER.	GENUS. SPECIES.	COMMON NAME.
1.	1. Ranunculacææ.	Cimicifuga-racemosa.	Black snakeroot.
"	2. Magnoliacææ.	Magnolia-glaucæ.	Small magnolia.
"	17. Droseracææ.	Drosera-rotundifolia.	Round leaved sundew.
"	19. Hypericacææ.	Hypericum-corymbosum.	Dotted hypericum.
"	"	Hypericum-ellipticum.	Light yellow hypericum
"	"	Hypericum-adpressum.	Bright yellow hypericum.
"	21. Caryophyllacææ.	Saponaria-officinalis.	Soapwort.
"	"	Silene-stellata.	Starry campion.
"	"	Silene-inflata.	Bladder campion.
"	26. Linacææ.	Linum-Boottii.	Yellow flax.
"	29. Balsaminacææ.	Impatiens-pallida.	Pale touch-me-not.
"	34. Rhamnacææ.	Ceanothus-Americanus.	New Jersey tea.
"	37. Polygalacææ.	Polygala-polygama.	Rose-purple milkwort.
"	38. Leguminosææ.	Crotalaria-sagittalis.	Rattlebox.
"	"	Cassia-Marylandica.	Wild senna.
"	39. Rosacææ.	Spirea-salicifolia.	Meadow-sweet.
"	"	Spirea-tomentosa.	Hardhack.
"	"	Agrimonia-Eupatoria.	Agrimony.
"	"	Geum-strictum.	Yellow avens.
"	"	Potentilla-arguta.	Cinquefoil.
"	"	Dalibarda repens.	Dry strawberry.
"	41. Melastomacææ.	Rhexia-Virginica.	Meadow beauty.
"	43. Onogræææ.	Epilobium-angustifolium.	Willow herb.
"	"	Epilobium-palustre.	Slender epilobium.
"	"	Epilobium-coloratum.	Purple epilobium.
"	"	Circæa-alpina.	Enchanter's nightshade.
"	52. Umbelliferææ.	Archangelica-peregrina.	Archangelica.
"	"	Discopleura-capillacea.	Bishop's weed.
"	"	Conium-maculatum.	Poison hemlock.
"	53. Araliacææ.	Aralia-racemosa.	Spikenard.
"	56. Rubiacææ.	Cephalanthus-occidentalis.	Button-bush.
"	"	Mitchella-repens.	Partridge-berry.
"	59. Compositææ.	Aster-corymbosus.	White aster.
"	"	Erethites-hieracifolia.	Fireweed.
"	"	Iva-frutescens.	Highwater shrub.
"	"	Cichorium-Intybus.	Succory.
"	60. Lobeliacææ.	Lobelia-cardinalis.	Cardinal flower.
"	62. Ericacææ.	Gaultheria-procumbens.	Wintergreen.
"	"	Clethra-almifolia.	Sweet clethra.

FLOWERS OF JULY — *Continued.*

CLASS.	ORDER.	GENUS.	SPECIES.	COMMON NAME.
1.	62. Ericaceæ.	Kalmia-glauca.		Pale laurel.
"	"	Pyrola-secunda.		One-sided pyrola.
"	"	Monotropa-hypopitys.		Pine sap.
"	74. Scrophulariææ.	Gerardia-purpurea.		Purple Gerardia.
"	77. Labiataæ.	Germander-Canadense.		Wood sage.
"	"	Trichostema-dichotomum.		Blue curls.
"	"	Mentha-Canadensis.		Mountain mint.
"	"	Cunila-Mariana.		Dittany.
"	82. Solanaceæ.	Solanum dulcamara.		Bittersweet.
"	"	Solanum-nigrum.		Nightshade.
"	"	Physalis-Philadelphica.		Ground cherry
"	"	Nicandra-physaloides.		Apple of Peru.
"	"	Hyoscyamus-niger.		Black henbane.
"	"	Datura stramonium.		Thorn apple.
"	83. Gentianaceæ.	Sabbatia-stellaris.		Century.
"	"	Sabbatia chlorides.		Rose-colored centuary.
"	85. Asclepiadaceæ.	Asclepias-cornuti.		Greenish silkweed.
"	"	Asclepias-purpurascens.		Purple silkweed.
"	"	Asclepias-obtusifolia.		Wavy silkweed.
"	"	Asclepias incarnata.		Swamp silkweed.
"	"	Asclepias tuberosa.		Orange butterfly- weed.
"	87. Aristolochiaceæ.	Aristolochia serpentaria.		Snakeroot.
"	89. Phytolaccaceæ.	Phytolacca decandra.		Pigeon-berry.
"	90. Chenopodiaceæ.	Salicornia-mucronata.		Crimson samphire.
2.	119. Orchidaceæ.	Gymnadenia-tridentata.		Greenish orchis.
"	"	Platanthera-dilitata.		White orchis.
"	"	Platanthera-flava.		Yellowish orchis.
"	"	Platanthera-ciliaris.		Yellow fringed orchis
"	"	Platanthera-Clephariglottis		White fringed orchis
"	"	Platanthera-lacera.		Ragged orchis.
"	"	Platanthera-psycodes.		Small purple orchis.
"	"	Spiranthes gracilis.		Ladies' tresses.
"	"	Calopogon pulchellus.		Swamp pink.
"	"	Tipularia-discolor.		Crane-fly orchis.
"	"	Microstylus-monophyllus.		Adder's mouth.
"	"	Corallorhiza-multiflora.		Coral root.
"	"	Cypripedium spectabile.		Showy ladies'-slipper
"	"	Lilium-superbum.		Superb wild lily.



AUGUST 1.

The trees we shall most assuredly study, the beautiful, the graceful, the stately, the hundred armed, the dear old protecting trees. How wonderful they are; as much so as those immense rocks which one sometimes sees in a fair, level green field, looking as if they could not have grown, could not have been thrown there, could not have come there in any imaginable way. So these great trees seem: when did they grow? They are no larger that one can see from year to year. How mysterious they are, in silent grandeur putting on their vernal robes, as silently putting them off in autumn, and standing in solemn dignity with their dark, bare branches drawn up to delicate points against the gray wintry sky. And the bare branches are a study of themselves; the eye delights to follow the perfect lines, the cathedral

arches, the boughs interlacing in every graceful arrangement. How persons can cut down trees so remorselessly, passes my comprehension. To destroy these natural ornaments which a life-time cannot restore, these marvelous structures, every slender twig, every buoyant leaf revealing the hand of Omnipotence, and none the less marvelous because so freely bestowed on vale and hill, or because so little appreciated by so many over whom they throw their grateful shade. I should never build town nor city if I had to sacrifice these "nobles to the manor born;" I wish every one who has the gift of eloquence would plead for the trees. I remember noticing in a beautiful village on the Hudson, a majestic chestnut-tree standing right in the centre of a handsome street, where it might be considered somewhat in the way, and in the same town, in front of a pretty house, some graceful forest trees were left standing; passing directly through the tasteful piazza, they waved their mighty arms above the roof, and stretching over, shook hands with others behind the house. I wish a noble oak, or perhaps a vase-shaped elm, grew in the middle of our parlor. Trees are so solemn too, in the dusk or later in the evening; the very soul is oppressed with awe in standing under their heavy shade. Aunt Emily says she can never forget the pang with which she watched in early days the gradual decay of a fine maple which hung over the gateway of her New England home. Two of these noble trees grew side by side; in autumn the tints of one were crimson, the other golden, and though at some distance below the front of the house, the mingled flush of color, when lighted by the afternoon sun, flooded the parlors with an unforgetten glow. From some unknown cause, the golden-tinted began to

decay at the top, branch after branch, until the tree was dead.

Its companion came out with all its wealth of verdure for one summer after its friend was gone, and for one autumn its crimson banners threw back the glancing light, and then the same sad process began with that. About this time the family decided to leave the old home for a climate less severe, and the natural sorrow at bidding farewell to the beloved and beautiful spot, was mitigated by the fact that the trees, the dear familiar trees, the family pets, the overshadowing friends, whose leaves had danced gayly above the young heads, or sighed pensively over the older, were saying to each other, with prophetic whisper, "Let us depart."

Many of the trees around here are new to Father and to Aunt Emily. Along the banks of the ravine and up to the hill-tops, grow walnut-trees, chestnut, tulip, sassafras, sweet-gum, witch-hazel, locust, ash, dogwood, poplar, maple, birch, beech, elm, oak, larch, cypress, juniper, hemlock, spruce, cedar, pine, fir, and others. On the bank opposite my window, a weather-beaten old chestnut, with its brawny and battered limbs, stands close beside two beautiful tulip-trees, fresh and fair in all the pride of youthful symmetry. The tulip-trees have been profusely decked with the blossoms which distinguish them, and are still adorned with elegant and luxuriant foliage, but their sturdy neighbor, with no beauty to boast of, has "something than beauty dearer" to some eyes, and is noticeable from afar for the thickly crowded chestnut burs, bristling in all directions, and waiting only for the frosts of autumn to ripen and open, and shower down the nuts to expecting hands.

By and by I shall give you the botanical names of

some of the trees, for we are going to learn all about them, and shall have a tree-book as well as a flower-book. But without knowing them scientifically, there is much to interest a mere common acquaintance. The variety of trees around here, astonishes many of our city visitors, — twenty-three at least, in the walk from the front fence to the mountain top, — and they wonder how we can tell one tree from another by the bark, all tree-bark looking alike to them; but let them have a home in the country some day, with their own majestic trees towering above their heads, and they will soon learn to tell one kind of tree from another.

There are a dozen or more varieties of oak which are found in this vicinity, all having a family resemblance, and it does seem as though it would be difficult to tell the points of difference, but they are understood by observant eyes, and many of the unlearned farmers know at a glance a red-oak from a white, and all others as well.

The white-oak has deep acorn cups with little bunches on them, and acorns about an inch long, and the bark is whitish with dark spots upon it; the dwarf-oak has small, sweet acorns, in such abundance as to weigh the branches to the ground; the red-oak has acorn-cups so shallow as to look like saucers; while in the black-oak the cups are so deep as to half cover the acorns; the scarlet-oak has large acorns rounded alike at both ends and a deep cup, and in autumn the leaves turn scarlet unlike any other oak; the pin-oak is remarkable for great numbers of small branches which die as the tree grows older, leaving bunches of short stems which look like great pins driven into the trunk; and thus every species has something particularly its own which shows where it belongs.

So with the striking and interesting birches. The white-birch, "Bride of the Woods," is a slender, graceful tree, with chalky white bark gleaming through the forests; the leaves are long-pointed, shining, and tremulous; the canoe, or paper-birch, has a bark which splits into numerous thin sheets which can be made into various pretty things, and upon which little boys and girls often write notes, and upon which you really can draw and write very nicely.

As it is called the canoe-birch, it was of this, no doubt, that Hiawatha made his wonderful canoe, —

"Give me of your bark, O birch-tree,
Lay aside your cloak, O birch-tree!
And the tree with all its branches
Rustled in the breeze of morning,
Saying with a sigh of patience,
'Take my cloak, O Hiawatha!'"

The red-birch has a reddish-brown bark; the yellow-birch a yellowish-silvery bark; the sweet-birch has dark chestnut-colored bark; the leaves and twigs have a spicy, aromatic taste, and an agreeable odor, and the wood is rose-colored; this is a lovely kind. The American poplar, or aspen, is also an interesting tree, with dark-green leaves, and the long leaf-stalks laterally compressed, so that the very faintest breeze keeps them tremulously in motion. The abele, or silver poplar, has leaves dark-green above and silvery white beneath, and when the wind sways them, the white linings turn out, looking like long sprays of fair white flowers. And of the delightful maples there is some distinguishing characteristic for each of the many species. The sweet-gum tree (*Liquidambar*), which grows abundantly in this region, is one of the most beautiful trees I ever saw; the star-shaped leaves are now of a fine green, and in

the autumn, we are told they are more brilliantly colored than the maples, often mottled in a peculiar manner with crimson and green, and a shade of gray melting into a soft lavender tint; the seed-vessels are peculiar, — round balls covered with bluntish spines. We found many of these in the winter. The bark of the tree yields an odorous gum, a “fragrant terebinthine juice.”

Are you tired of trees? I could fill pages with notices of our new friends belonging to this class, but will leave them now, though not without an affectionate word for the sassafras, aromatic from the tiptop airy leaf to the deepest roots burrowing beneath the soil, and a tribute of admiration to that ornament of the woods, the gay *Cornus-florida* (flowering dogwood), which fairly lights up the woods with its showy white blossoms in early spring, and these are succeeded in autumn by softly colored berries. Then the solemn old hemlocks are wonderful trees, so fragile and graceful in youth, so sturdy and majestic in middle life, so dark, distorted, strange, and fitful, in old age. One of these immense trees stands beside a horrid looking old house (which is called haunted), on a lonely and dreary road, and it really looks as if some dreadful sight seen within the great, desolate windows, had frightened it out of all shape; on the side towards the house, it presents only a gnarled mass of black and broken, tangled and twisted stems, with not one sign of life or verdure, while the other side is green, but the foliage is all huddled up in bunches, and hangs in great unsightly balls upon the very ends of the crooked boughs, as if something had sent it hurrying along the misshapen branches to get as far away as possible from whatever it was that frightened it.

At this season the profusion of flowers is decreasing, the delicate vernal blossoms have faded and gone, and some brilliant later flowers have not yet appeared. In the glaring sunshine of these glowing noons, —

“ The bowers are mute, the fountains dry,
And ever Fancy's wing
Speeds from beneath the cloudless sky,
To autumn or to spring.”

But the trees are in full and overshadowing beauty, so we are making friends of these. In a few days we are going to New England, that mother-land so dear to every loyal son and daughter. For five or six weeks we shall miss whatever Nature may bring to this fair region, but we hope to find treasures on the New England hills.

Before we go, I must tell you something of parasitic plants, also of air-plants. Several plants of the parasitic family are found in the woods around here; they differ much from our floral favorites, and have “ways of their own,” which separate them from our dear and true and honest woodland friends, who are above suspicion as to any mean or underhand processes.

AUGUST 5.

We have found several parasitic plants, some with pretty flowers and others with curious ones. But the whole family (*Plantæ-parasiticæ*) are destitute of the peculiar charm of honest wild-wood blossoms, or of the ethereal spirituality which distinguishes the air-plants. Still they have an interest as varieties in the domain of Nature. There is, however, something in their predatory way of getting a living which no honest mind can approve; not the old-fashioned, faithful, and trustful working for it, from seed to flower, in that mother-earth where

most of the floral tribes find nourishment, but stealing from root or branch of hapless neighbors the living and vital juices, which they by patient processes have elaborated for their own sustenance. These parasitic plants do not send their roots into the earth, but attach themselves to shrubs and trees in various ways. Some



of them have green foliage, others have no leaves at all, only blossoms and colorless bracts.

The American dodder (*Cuscuti-Gronovii*) is with us the most common example of this class of plants. The seed of the dodder falls into the soil, and springing up, attaches itself to the first plant it touches, and, clinging closely to its victim, its own root soon dies and the

lower part of its stem perishes, and hereafter the parasite lives upon the plant to which it has affixed itself, sending little rootlets into its vital tissues, and coiling round and round it in a snarl of yellow, leafless tendrils. Then there is the mistletoe, so famed in song. I am sorry the mistletoe is a parasite, so poetical as it is and so beautiful also. But alas, with its smooth green leaves and brilliant pearly white berries, it is an accomplished marauder and totally unscrupulous; not only does it send its roots through the bark and growing wood of the tree it fixes upon, and steal the ascending sap to give verdure to its own leaves and glitter to its polished berries, but the pillager so incorporates itself with the tree whose life it steals as to appear to be actually a part of it. Another of these parasites is the painted cup (*Castilleia-coccinea*), the upper leaves of which are brilliantly colored with scarlet; this is a handsome, showy little plant, in which we took a great interest one summer in Connecticut, and transplanted it over and over again to the garden, with no success whatever; it would never live. This gay favorite we now find is a parasite, and none of this family will bear transplanting. The purple and yellow Gerardias belong to this plundering family, also beech-drops (*Epiphegus-Virginiana*), pine-sap (*Aphyllon-uniflorum*), and the pallid Indian-pipe (*Monotropa-uniflorum*).

These last have a weirdish glimmer and ghostly gleam, and turn black in drying, as do parasitic plants generally. A wonderful parasitic plant is found in Sumatra, growing upon grape-vines. It has no leaves, and the blossom, which is of pale orange, mottled with purple and white, is nine feet in circumference and weighs fifteen pounds. Woe to the hapless grape-vine which

this monster grapples. Mr. A. O. Moore describes a remarkable parasite which he saw in Central America called "Mater-palo, or tree-killer;" it looks like an enormous tree composed of six or eight trunks, which start from the ground independently of each other, at different distances in a circle of twenty feet or more; after ascending twenty or thirty feet, these interlace, and unite, and finally become one, the tree growing to the height of one hundred and fifty feet. In reality the seeds of this parasite take root in the bark of some tree, sending down branches to the earth at various points to support it, and side-shoots to stretch around the trunk; these grow very rapidly, and the interlacing coils, as they increase, press more and more tightly upon the tree beneath, which, no longer able to expand, soon dies. He says that he saw one of these which had chosen a palm-tree for its victim, not knowing perhaps that in the palm-trees the new layers of wood are deposited in the centre of the stem, instead of under the outer bark, and the trunk never increasing in diameter, however tall the tree may grow, it may be squeezed to any extent without injury. And so it happened in this case; at the height of fifty or sixty feet, the plume-like top of the palm came waving out from the arms of its conquered enemy all fresh, and green, and flourishing.

In another instance, the treacherous destroyer had mistaken a column-like rock for a tree, and had wound it round and round with its cables; the rock seemed very tranquil and comfortable, but the baffled thief wore an unthrifty look, and he adds, "one could not help exulting, as at a case of disappointed villainy." The order *Fungi* consists of parasitic plants; it includes mushrooms, mould, blight, mildew, puff-balls, and all

those disagreeable things. A horrid family, I think, and I shall never be a true botanist, if to be that, it is necessary to love these and enjoy examining them. I hate to touch them, — soft, spongy, moist, unpleasant bodies that they are. But the crisp, and clean, and charming lichens, decking the rough rocks and the old fences, — these do not belong to the parasites, they are the unpretending sisters of the gay and flaunting air-plants.

AUGUST 6.

The unique and elegant air-plants must not be classed with the parasites, though some writers do thus confound them. They are no parasites, but children of the air, rare and radiant blossoms fostered by fragrant gales in spicy islands, or glowing tropical countries. It is true that they attach themselves to the trunks and branches of trees, but not to steal their vital juices nor to strangle them in treacherous embraces, but to adorn them with a wealth of gorgeous beauty, which no pen or pencil can portray. They choose those positions which will bring them the soft breath of tropical breezes, the humid airs which float in the sultry tangles of musky groves, and the reflected light which quivers through the dense foliage of equatorial forests; they steady themselves in their elevations by a light lacing of slender fibres around the trunks or branches of trees, but these penetrate no vital part, and do no injury. During the rainy season in these warm latitudes, they grow with great rapidity, sending roots into the air and drawing from thence their nourishment; these aerial roots stand out in all directions around the pseudo-bulbs, as they are called; these bulbs vary in size from one to several inches, and from their points the leaves spring; they

are generally long and narrow leaves, and often strangely mottled with brown, red, purple, and white. At the



Sagittaria-variabilis.

base of these bulbs, the flower-stalks shoot up, varying in length in different plants, and bearing sometimes one brilliant blossom, sometimes fifty or one hundred. The flower-stalks are jointed, with a small

scale at each joint, and upon the end sway the gorgeous blossoms, resembling glittering butterflies, or gay tropical insects; and the slender, neutral-tinted stem, unnoticed amidst brighter coloring, often several feet in length, swinging with every breeze, and lifting and floating the winged blossom, makes the illusion perfect. These plants are the greatest curiosities in the floral world, and the richest rarities of the greenhouse. It is said that they were described in "terms of glowing rapture" by the early writers on the floral productions of India and tropical America, yet their cultivation in Europe has been comparatively recent, and until the present century they were scarcely known in England and still less in this country. Dr. Lindley was chiefly instrumental in introducing these fantastic wonders to flower-lovers in England, and of late years they have been sought for with eagerness, and at one time a large ship came freighted with orchids only, and as many as three thousand species are at present cultivated in England.

Orchids are generally air-plants, but a few grow upon the ground, and these are called terrestrial orchids. "El-Espiritu-Santo," or dove-flower! Do you not remember the enchanting description we read of that flower? the blossom like a pure and pearly cup, and poised within it the image of a snowy dove, the white wings lightly dropped with purple; we thought it must be a fabrication, a "traveller's wonder." But this wondrous plant (*Peristera-elata*), a native of Panama and other South American countries, is now cultivated in England and the United States. It is a terrestrial orchid, though I think, of all others, this white-winged dove has a right to float in air. The pseudo-bulbs of the dove-flower are upon the surface of the ground, and take root enough

for their own purposes ; they are bright green in color, and several inches long, and the leaves which spring from their points are narrow and linear, and sometimes three or four feet in length. The flower-stalk comes out at the base of the bulb on one side, shoots up three or four feet, and is crowned by a raceme of pearly white waxen flowers, nearly circular in form, and an inch or two in diameter ; within this fitting shrine "hovers the image of the snowy dove."

It is not strange that in the lands of superstition and idol-worship, where this beautiful and wonderful specimen is found, it should be regarded with reverential admiration. I think I should look on such a flower with a certain tender awe accorded to no other floral favorite. The *Tillandsia-usneoides*, or what is called the long-moss of the Southern States, hanging in gray festoons and streamers from pines and oaks, and filling the sombre forests with its swaying gloom, is no moss at all, but an air-plant, gloomy-looking it is true, but curious and interesting, and presenting a very striking contrast to its gayly glancing sisters of the same family. A friend sent us a tangle of this long-moss from the South, and we twisted it among the crevices in the trunk of an aged tree, where it remained securely anchored, bathed in the sunshine and the shower, and one day a visitor who had travelled far and wide came in greatly surprised, and told us that to his amazement he had found Spanish moss, (as he called it, and which is the same thing) growing upon one of the trees behind the house. A smile which could not be suppressed stole over some of the faces, which induced the traveller to put a few questions, and the mystery was solved, otherwise he might have stated to some scientific society that Spanish moss grew within a few miles of New York. In Buenos

Ayres, the fragrant *Tillandsia-xiphioides* grows upon the wood-work of the balconies of houses, perfuming the air to a distance around; and the forests and islands of tropical Asia, Africa, and America, abound in species of fantastic growth, wonderful beauty, and delicious sweetness. In Java alone, more than three hundred varieties have been found.

To induce these splendid foreigners to thrive in our less genial clime, we should give them, as far as possible, the surroundings which they choose for themselves in their own luxuriant homes. They can bear great warmth if accompanied with enough moisture, and moisture they must have; they prefer a reflected and somewhat shaded light to the strong glare of direct sunshine; they require a position where the water will run off from the roots, and yet the moisture be retained, and for this purpose, finely chopped moss upon the piece of wood to which they cling is desirable; they detest any impurities, and stagnant water is death to them. A glass case sufficiently spacious would seem to combine all the requisites; as a high temperature can be combined with great humidity, strong sunshine can be mitigated at pleasure, an entire freedom from dust and insects can be secured, and a nicety of detail obtained in all particulars, suiting the ethereal tastes of these fastidious and elegant denizens of air. Of the lichens which adorn the old tree trunks, and stones, and fences, I have written you before, but hardly realized that these simple and often unnoticed plants, had any relation to those gorgeous blossoms which are the pride and wonder of the greenhouse. They are air-plants, however, just as much as those "far-fetched and dear-bought" treasures from foreign lands.

FLOWERS OF AUGUST.

CLASS.	ORDER.	GENUS. SPECIES.	COMMON NAME.
1.	17. Droseraceæ.	Drosera-filiformis.	Thread-leaved sundew.
"	18. Parnassiaceæ.	Parnassia-Caroliniana.	Flower of Parnassus.
"	37. Polygalaceæ.	Polygala-sanguinea.	Purple polygala.
"	"	Polygala-cruciata.	Rose-colored polygala.
"	38. Leguminosæ.	Lathyrus-maritimus.	Beach pea.
"	"	Phaseolus-perennis.	Wild purple bean.
"	"	Apios-tuberosa.	Fragrant glycine.
"	"	Galactia-glabella.	Purple pea.
"	"	Amphicarpæa-monoica.	Pea-nut.
"	"	Cassia-nictitans.	Wild sensitive plant.
"	39. Rosaceæ.	Sanguisorba-Canadensis.	Burnet.
"	43. Onagraceæ.	Epilobium-lineare.	Narrow epilobium.
"	59. Compositæ.	Vernonia-Noveboracensis.	Purple iron weed.
"	"	Liatris-scariosa.	Gay-feather.
"	"	Eupatorium-purpureum.	Trumpet-weed.
"	"	Aster-macrophyllus.	White aster.
"	"	Aster-Radula.	Violet aster.
"	"	Aster-undulatus.	Blue aster.
"	"	Aster-Tridescanti.	Purplish aster.
"	"	Aster-acuminatus.	Purple and white aster.
"	"	Solidago-squarrosa.	Golden-rod.
"	"	Solidago-bicolor.	Golden-rod.
"	"	Solidago-puberula.	Golden-rod.
"	"	Solidago-rigida.	Golden-rod.
"	"	Solidago-odora.	Sweet golden-rod.
"	"	Helianthus-divaricatus.	Sunflower.
"	"	Achillea-millefolium.	Yarrow.
"	"	Gnaphalium-polycephalum.	Everlasting.
"	"	Antennaria-margaritacea.	Pearly everlasting.
"	60. Lobeliaceæ.	Lobelia-spicata.	Pale blue lobelia.
"	69. Plumbaginaceæ.	Statice-Caroliniana.	Sea lavender.
"	74. Scrophulariaceæ.	Linaria-vulgaris.	Butter and eggs.
"	"	Gerardia-maritima.	Sea-side gerardia.
"	"	Gerardia-tenuifolia.	Slender gerardia.
"	"	Gerardia-flava.	Downy gerardia.
"	"	Gerardia-quercifolia.	Smooth gerardia.
"	83. Gentianaceæ.	Gentiana-quinquefolia.	Five-flowered gentian
"	"	Bartonia-tenella.	White bartonia.
"	"	Sagittaria-variabilis.	Arrow-head.
"	"	Goodyera-repens.	Rattlesnake orchis.
"	"	Spiranthes-cernua.	Fragrant ladies' tresses.

SEPTEMBER 27.

Since I wrote you, we have been staying with friends in a charming New England village, where the nice, comfortable, and in many instances, elegant residences, are built at varying distances along the rural, irregular street, for one or two miles. Overhung with fine trees, — elm, maple, and linden, with now and then the pensive droop of a willow, — this old street is beautiful and picturesque at all times, and somehow everything that passes along partakes of the same character. The great loads of hay touched by the down-drooping branches; the tasteful turn-outs of wealthy inhabitants, the gay picnic parties, the ladies on horseback, the vehicles of every description, the every-day walkers along; everything, whether great or small, is seen through cathedral-like arches, and puts on that peculiar aspect which makes you say, "It looks just like a picture." The windows overlooking the western hills and vales, give charming groupings of trees in all directions; clumps of graceful elms, masses of thick-boughed maples and chestnuts, here and there the majestic individuality of a towering hickory, or the light shaft of a poplar, while the broken hills in the distance, with mists and cloud shadows, present a beautiful and continual picture. One morning there was a wedding in the village; a young lady, living in one of the finest old residences, was married, and on that day the beautiful town wore its fairest aspect. The bride lived near the southern extremity of the long street, and we had the opportunity of seeing the wedding guests wending their way on this most glorious midsummer morning. The carriages of those who rode glanced in the mellow light, and far more picturesque than these, ladies in light and graceful dresses, with no

bonnets, and with roses in their hair, with parasols and floating scarfs and ribbons, walked with attending cavaliers in the cool shadows of the heavy foliage. "Peace charmed the earth beneath their feet," and we could but wish that the bride, in that far western home to which she was going, might find something as beautiful as the home she was leaving.

This village lies in a wide spreading valley, surrounded on all sides by bold hills. Its natural situation is beautiful, but half its charm is owing to the good taste which has spared and protected the noble trees which so adorn it. We went one day with a picnic party to the top of one of the highest mountains, where was a stone tower, and from the summit of this, the view was delightful over a lovely country for miles and miles. Just below this tower lies a beautiful little lake, shut in by high rocks and hills, where the summer sky and the cliffs and headlands were so wonderfully mirrored, that they looked even more distinct within than without. Here we found a pretty little water-plant, with smooth, heart-shaped leaves, upon which rested clusters of delicate little white flowers, which bore the romantic name of floating-heart, or *Limnanthus-lucanum*, botanically.

Upon the borders of the lake, the sweet-scented Clethra grew in profusion, filling the air with fragrance, and the downy racemes of pretty white blossoms reaching so far over the water as to be easily picked as we sailed along. We found pink yarrow, also, which is very pretty, though some of our party considered it a poor-looking weed. The more one cultivates friendly relations with the plants that grow on hill or dale, the fewer will be the "poor-looking weeds" which he will pass by with contempt.

While we were in this place, a little boy belonging to the family where we were staying, came in one day from a forest ramble with something which his young eye perceived was a rarity. It was the very walking-



fern for which we had so vainly hunted, and as we expressed gratification, our young friend said he would get us a hundred if we wanted them.

SEPTEMBER 30.

From this village we went still further east, until we found ourselves in a hospitable mansion which overlooks the glorious ocean. Here, at the base of a rocky cliff a short distance from the house, dashes forever the myste-

rious sea, about which so much has been said and sung, but whose mysteries yet remain as exhaustless as its own depths. That low ocean roar forever sounding, how it awes and enchains the spirit; as I listened in the night, it came surging on and on, every wave sounding nearer, until I had resolutely to shake down my rising terror, and realize that it was impossible for the next boom to come sweeping over the top of the house. Here from the chamber windows before you rise in the morning, you can see "the stately ships go by," and all night the wondrous eyes of the light-houses are keeping watch for the homeward bound mariner. How wonderfully interesting to us were all these ocean arrangements; how we watched the light-houses at night, the revolving one particularly; and how strange and perilous seems the life of a sailor when one gazes into these solemn ocean depths, and contrasts their treacherous flow with the good, old, solid earth.

How we marveled as we strolled at twilight beside the "sad sea waves," that any one could be courageous enough to "go to sea," though we think that living in a light-house must have a dash of the sublime in it. A young daughter of a light-house keeper told us how her father had to watch his lights all night; the darker and stormier the night, the more vigilant he must be. It is poetry after all that throws such an enchantment over all seafaring things; "The fisher is out on the sunny sea;" how captivating! but let him come in to clean the fish, and the fastidious singer of ocean songs feels no inclination to pursue the investigations. But there is poetry, and romance, and happiness (or there was to us) on the silvery sands of Massachusetts Bay, and among the grand old rocks that guard the coast, seamed and chan-

neled, as they are by the buffetings and caressings of the capricious waters. We gathered sea-weeds for pressing, — those delectable sea-weeds we so much admire. I shall keep a quantity till you come, and then we will arrange them, for they will come out as fair as ever after being dried for months if placed in water. I have a great bunch in safe keeping, though, as a lady remarked, “they look like horrid trash;” yet within them is enshrined the very essence of enchantment, the delicate grace, the lovely coloring, the odor of ocean. One day I was at my accustomed employment, choosing with intense interest from the wet heaps thrown upon the beach, “the fairest I could see,” when a laborer, who was filling a cart with the coarse sea-weeds, came up to me and said, “Would you like a few *feathers*, Miss?” I had not any idea what feathers were thus surrounded, but with an intuition that they were something to be desired, I replied, “O yes, I should like them very much.” He thrust his hands into his old pea-jacket pockets, and drawing out the feathers, added them to my treasures; they were the most delicate and fairy-like of sea-weeds, a sort of gossamer, feathery plume a few inches long, of a soft, silvery gray and glistening all over with diamond-like sparkles. I was enchanted with their graceful beauty, and thanked the sea-dashed giver, who informed me that he always picked “them shiny ones out to give to ladies, — they thought so much of ’em.” And the ladies with whom we were staying, told us that these feathers were rare and greatly prized by sea-weed hunters, so I shall value them as they deserve, and hold in kind remembrance that rough laborer upon whom the romance of the sea had so much power as to induce him to select from his rude cart-loads these airy-looking little things

to "give to ladies." We hoped there would be a rousing storm during our sea-side visit, to make the waves dash mountains high, but the sea was calm as summer mornings all the time we stayed. Then we hoped we might see what the ladies often did see through spy-glasses, — one of the gentleman's ships "come sailing up to the strand," and know it far out at sea by the signals, before he knew anything about it himself; but we watched for them in vain, though three were daily expected. Then we tried in vain to count three hundred sail in sight, which they often do from the piazza; never more than forty or fifty, and at one time sixty, would obey our spell. Then we looked for whales, with not very good success, though they are frequent visitors. One day one of the ladies threw down the spy-glass through which she was looking, with an exclamation of terror, which was succeeded by a hearty laugh when she said she thought a whale was spouting close beside her, so near did the glass seem to bring him. Neither would the sea-serpent come at our call, though Helen and I took observations for him whenever we had possession of the glasses, because there was a rumor that some fishermen in the vicinity had seen recently what they "took to be" this bewildering individual. But we found enjoyment enough without these extras, and a sea-beach, with its grand old rocks washed by the Atlantic Ocean, is surely enough to satisfy.

Within doors, the gentleman has, in a room arranged for them, a large collection of African birds of rare species and brilliant plumage. One kind which they call the celestials, of a delicate sky-blue, with touchings of soft gray, are perfectly bewitching. These little creatures will seize in their beaks slender straws, which

are put into their cages, and begin dancing up and down with a regular and harmonious movement, singing a sweet and peculiar note which they never sing at any other time and which the family recognize as the "dancing tune," whenever they hear it. This dancing comes natural, as they have never been taught. Some of the other small birds often imitate them, and succeed very well, though the palm of fairy-like grace must be awarded to the celestials. Then there were the beautiful cardinal, or whydar birds, with glossy plumage, long sweeping tails, and brilliant scarlet around the throat. Another bird was of most vivid emerald green, with little blocks of black and white around the neck, and a most demure phiz above it; this bird is quite large and in a cage by himself; he never sings, and wears a solemn and demure and somewhat melancholy expression, and you would infer instantly, on looking at him, that he did not approve of dancing, but no sooner do the merry little celestials strike up their dancing tunes, than he begins to creep up the side of his cage in a most peculiar style, with fantastic twirls, till he reaches the wires at the very top, when he will twist himself about and bend his grave visage over as far as possible, to look at them, uttering at intervals a low chuckle which sounds like a laugh, and he evidently enjoys what is going on.

Then the gentleman took us in town, and we went with him to his wharves and his warehouses, and saw his ships tossing on the deep, which were to sail away to that mysterious and wondrous Africa, and come back laden with gums, and spices, and rare woods, and ivory, and gold-dust. In a room in one of his warehouses were piled the elephants' tusks, and I must say I was disappointed in these; I expected to see them white as

ivory paper-cutters, or any pretty ivory articles, but they were a dingy brown, and as unsightly a heap as one would wish to see; but the white is in them, to be evoked at the right time, and there is something besides white in them, for the clerk told us the value of some of them, which touched a point that sounded incredible to ears uninstructed in such lore.

On the morning of the day we left, we were called in season to go upon the balcony and see "the crimson streak on ocean's cheek, grow into the great sun;" and with this glorious picture freshly painted on memory, we bade farewell to the kind friends, the pleasant mansion, the varied scenery of land and wave, the calm majesty of Massachusetts Bay sparkling in the morning sun, and with glancing white sails enough, just then, we verily believed, to make three hundred if we could only have stopped to count them.



FLOWERS OF SEPTEMBER.

CLASS.	ORDER.	GENUS.	SPECIES.	COMMON NAME.
1.	12. Cruciferae.	Cakile	Americana.	Sea rocket.
"	23. Malvaceae.	Althea	officinalis.	Marsh mallow.
"	"	Hibiscus	moscheutos.	Swamp mallow.
"	59. Compositae.	Eupatorium	sessilifolium.	Boneset.
"	"	Aster	spectabilis.	Violet-blue aster.
"	"	Aster	laevis.	Sky-blue aster.
"	"	Aster	cordifolius.	Pale-blue aster.
"	"	Aster	sagittifolius.	Pointed-leaved aster.
"	"	Aster	ericoides.	White aster.
"	"	Aster	multiflorus.	Pale purple aster.
"	"	Aster	dumosus.	Bluish aster.
"	"	Aster	simplex.	Light-blue aster.
"	"	Aster	tenuifolius.	Purple aster.
"	"	Aster	Novae-Angliae.	Rose-purple aster.
"	"	Solidago	latifolia.	Golden-rod.
"	"	Solidago	virgata.	Golden-rod.
"	"	Solidago	patula.	Golden-rod.
"	"	Solidago	linoides.	Golden-rod.
"	"	Solidago	nemoralis.	Golden-rod.
"	"	Solidago	lanceolata.	Golden-rod.
"	"	Chrysopsis	falcata.	Golden aster.
"	"	Iva	ciliata.	Marsh elder.
"	"	Leontodon	autumnale.	Autumn dandelion.
"	71. Lentibulaceae.	Utricularia	purpurea.	Violet-purple bladderwort.
"	74. Scrophulariaceae.	Chelone	glabra.	Shell flower.
"	"	Mimulus	ringens.	Monkey flower.
"	76. Verbenaceae.	Verbena	hastata.	Blue vervain.
"	77. Labiatae.	Ballota	nigra.	Black hoarhound.
"	83. Gentianaceae.	Gentiana	crinita.	Fringed gentian.
"	"	Gentiana	Andrewsii.	Closed gentian.
"	"	Limnanthemum	lacunosum	Floating heart.

OCTOBER 5.

While we have been in New England, we have missed the late summer flowers that may be found here; but there are not many flowers in September and October to interest such superficial botanists as we are, so carried away by external charms. Late in the summer, the *Composite Family* brings out all its children who stream

in gay groups along the hedges and highways, and we have seen troops and troops of showy asters, and all the varieties of golden-rod; and though we shrink from imbricated calyces, and disks, and rays, and florets, yet our autumnal rides and walks were beautified by rich masses of purple of every shade, mingled with sprays of drooping white and racemes of brilliant yellow; and such is the harmonious coloring of these autumnal composites, that if one will leave them for gigantic out-of-doors bouquets, the effect is charming, but brought home to figure in some delicate vase, they look coarse and out of place. The tender grace of an exquisite little poem, however, has invested with a poetic charm, the —

“Golden-rod, and the aster in the wood,
And the yellow sunflower by the brook.”

The sunflower certainly does not look poetical, but there must be a depth of sentiment enshrined within it, for those staring yellow eyes look west at eve, and east at morn, and follow their worshipped sun all the day. But the glory of the autumnal months are the cardinal flower and the fringed gentian. No words can do justice to the carmine crimson of the cardinal flower, so brilliant as it is and showing so far off. And the enchanting blue of the gentian, who can paint it? We have tried, but alas, we cannot put the sunshine on, and that it must have to be perfect; for its perfection is at the midday hour of a gorgeous October day, when it spreads its cruciform fringed petals in the glowing sunshine. In a pretty village in Connecticut where we were staying, this beautiful fringed gentian grew in the greatest profusion along the roadsides and the woodland pathways.

Another gentian we also found of a fine blue, with clusters of bright rounded buds, looking from day to

day just ready to open, but we waited for that in vain; they never opened and never will, they were *closed* gentians (*Gentiana-Andrewsii*).

This secluded village among the Connecticut hills, two or three miles from the railroad station, gave us several rare and beautiful flowers. There we found the *Rhexia-Virginica*, or meadow-beauty, by the margin of a pretty picnic pond. It is a gay, showy plant, with blossoms of rosy purple, and golden, cross-shaped yellow anthers, streaked with purple, and the tube of the calyx swelling into a perfect little urn.

The flower of Parnassus we also found, named by Dioscorides, who found it growing on Mount Parnassus in his day; it is very pretty and peculiar, the large white petals being veined with delicate green lines. The painted cup was another rarity, the floral leaves being of the brightest scarlet. The charming Orchis tribe we also examined quite extensively. The Ciliaris, or yellow-fringed orchis, is rare and lovely, with bright orange colored flowers; the Dilatata has white blossoms; and the most beautiful of all is the fringed and fragrant purple orchis, which is a superb flower. The wild lilies are, many of them, showy and graceful, and one of delicate straw color, with a profusion of blossoms, was particularly elegant. The Epilobium, or willow-herb, was very abundant, covering some newly cleared fields with clouds of soft purple bloom.

But O, how trying we found it as we left these quiet villages, to be whirled along in the remorseless cars, seeing every minute, far down in the sheltered nooks, the flash of the fiery cardinal flower, or a rich tint of blue, or of yellow, and seeing in the recesses of the woods—



Parnassia-Caroliniana.

alas, we know not what we see, and never will know! — but such delectable things, such *new* flowers, as we take them to be, which it is agonizing to leave; but the conductor does not appear to see them, neither do the passengers, and if they did, we doubt if they would be willing to have the train stopped in order to secure the treasures. For my own part, I wish the trains would stop in the woods, instead of at those dusty and tedious and disagreeable depots.

Since our return we have been serenaded beyond measure by the katydids, and unless you heard them, you would not believe they could make such a clatter. To all the questionings of "Tell us now what Katy did; pray what did Katy do?" there comes forever the same old dogged reply, "Katy did" and "Katy didn't." One evening we were sitting on the piazza, and they made such a din that we could not hear ourselves speak; they seemed to have concentrated all their forces in three or four trees on the lawn directly in front of the house. A visitor inquired if we knew how to silence them, and as we did not, he requested Isabella, Helen, and me, to follow him, in perfect silence, each one taking a stand under a tree. He then told us to wait quietly until they were in full blast, then gently touch the trunk of the tree with the tip of the finger, or the point of a pencil, or the point of a *pin* even; we did so, and in an instant all the clamor ceased, the most profound silence succeeding.

After a while they began again, but with what seemed to us an awe-stricken faintness of tone, and at any time, the very lightest touch upon the tree-trunk would produce perfect silence. The party left upon the piazza, and who were rather incredulous as to our power over these clamoring myriads, said it seemed more like witch-

work than anything else. We could not account for this singular effect, neither could our visitor, to whom we naturally appealed for an explanation. He said he was told so at some place where he was staying, that he had often proved its truth and seen others try it with the same success, but that was all he knew about it.



I hope you have not outgrown the early admiration for four-leaved clovers, which we felt in the country in past summers, nor the girlish delight in seeing one start

up suddenly, as it were, before your eyes, so plain to be seen when it is seen, and so persistently invisible when it is not; appearing when not looked for, refusing to be found if searched for. Aunt Emily says the taste for these delights of childhood will never die out with her; the other day when sitting on the piazza talking with visitors, she excused herself a moment, and went down the steps to pick one which she saw in the grass, saying, as she came back, that she should always be a child so far as four-leaved clovers were concerned; and one of the ladies said that four-leaved cloverism was inborn, she thought, while a gentleman of the party, dignified and erudite, who might be supposed to be insensible to such trifles, said that he always felt pleased when he found a four-leaved clover, and he was reminded of a little incident which occurred at his house in the country. A friend, a lady who was oppressed with cares, anxieties, and sorrows, respecting which she had come to consult him, and who was talking with him with seriousness and solicitude, suddenly exclaimed, as she glanced from the window at which she was seated, "O, I see a four-leaved clover," and away she went to pick it, returning with a glow of girlish cheerfulness chasing for the moment the sorrowful lines of care.

Well, I was going to say, before being betrayed into telling this little story, that this is the place for these mysterious whisperers of something, we know not exactly what, but something charming. Sarah, the cook, who believes in *signs*, says it is a "sign of good luck;" but Aunt Emily says she is afraid that is a mistake, for she seldom steps out-of-doors without finding one or more, and she cannot discover that she is particularly favored in the article of good luck. The other day I pulled up

a whole bunch of clovers in a soft place, and all but one bore the mystic number. What great good luck is coming to me?



OCTOBER 20.

Can you guess this conundrum, "When is the best time to study the book of Nature?" You would find the answer around here now: it is "When autumn turns the leaves."

The autumnal tints are making the woods look like a giant's flower garden, or like an army arrayed in scarlet and gold, and hanging out gay banners to the very mountain top. Sombre hemlocks and pines bring out

the gayly tinted foliage so artistically, that the groups seem as if arranged by a skillful hand, and there can be no doubt as to the skillfulness of the hand, since Nature herself —

“Mixes the gorgeous autumn dyes,
And paints the woods about;
With green the scarlet underlies,
To bring the brightness out.”

We are now deep in colored leaves, and the fancy of the present hour is for bright coronets, and wreaths, and crosses, and crimson shadings, and “rich mosaics of olive, and gold, and brown.” Father says he cannot open a book without the out-tumbling of radiant beauties, which are too wonderful to be thrown away, and yet so abundant that all the books in the house could not contain them.

The big dictionaries, somewhat the worse for wear, are considered lawful plunder in the way of a pressing apparatus, but unfortunately these are in frequent demand, and alas, alas, who can tell how many of our tinted treasures are swept away to nameless graves! We are aware of some of our losses, however, for Isabella will say, “Now, where is that beauty that had streaks of crimson fading into purple? I am sure that I put it in this book; Father, have you seen it?” And Helen will say, “Dear me, I cannot find that wonderful leaf, little blocks of green, and yellow, and black, and white, a perfect mosaic. Father, I saw your friend from the city reading in this very book yesterday; do you suppose he took it?” And I say, “O, those lavender-tinted leaves tipped with scarlet. Father, did not you see them when you opened that great book?” Poor Father has to stand these daily questionings, but seems

very tranquil under our losses, even saying that every loss of this kind is a gain, as it makes room for another in its place.

We are consulting authorities and learning, in a general way, what colors the different trees select for autumnal dresses.

In the latter part of September the trees begin to exchange their greenness for other tints, and these increase in intensity through the early part of October. Brown, olive, yellow, red, crimson, scarlet, and all the *betweenities* of all these colors, giving shades and tinges more than can be specified. And this coloring of the leaf is not the effect of frost, as many trees are colored before the frost touches them; neither is it decay, for the leaves of brightest colors are as perfect, clear, and fresh as the leaves of summer. It is the full and beautiful ripening of tint which precedes the wintry touch. And here let me say that there is no going beyond Nature in gorgeousness of tints, or variety, or wonderfulness of combination, and those who paint autumn leaves need not think they have approached anywhere near Nature, for they have no paints to equal hers. To return to the colors in which trees choose to array themselves. Walnut-trees take shades of brown and yellow; maples, the darling maples, scarlet, crimson, orange, and all shades of all these colors, from the darkest maroon to the softest rose-tint. Gum-trees (*Liquidambar*) are peculiarly splendid, having pure crimson leaves, dark in the centre and shaded off to the lightest tint, or vivid scarlet curiously mottled with faint lavender and spots of silvery gray. The dogwood (*Cornus florida*) takes shades of dark crimson and brown, with tender tints of pinkish purple and ashes of roses. Elms

become bright yellow, often lemon-yellow that is very noticeable. Birch and beech appear in sober yellow ochre; ash, linden, and oak, in shades of brown, though one species of oak is scarlet. The beeches retain their greenness longer than most others; they with the Coniferæ, or needle-leaved trees, help to bring out their brilliant sisters, and after a while, when all are arrayed in fancy dresses, the beech exchanges its beautiful verdure for a dingy drapery of yellowish brown. It really seems as if the stately monarchs of the woods, and the graceful queens of forest society, with a prevision of the swift-coming disrobing days, were determined to meet destiny undismayed, and in one grand autumnal masquerade to bid farewell to vernal robes with the best grace possible. But the faithful evergreen family are never seduced from their integrity; no masquerading of next door neighbors can persuade them to mingle gay tints with the severity of their sombre robes; only in the gala days of spring and summer, a charming binding of lighter green creeps round the edges of the hemlock boughs, and a softer shade comes over the whole family, but the color is the same, — evergreen always. Only the larches change their color, the delicate, elegant larches, and they, though needle-leaved, are not evergreen trees. How exquisite are their pyramids of fairy-like verdure in summer with the beautiful dark cones; and late in the autumn, after all the brilliant tinting is lost and gone forever, the larches come out in soft buff yellow robes, arresting the eye amidst the leafless branches around them. The graceful woodbine is twining the brightest scarfs around the old trees in the meadows, and too often the gayest scarlet sprays flaunt defiantly just out of reach. And now I will close this long discourse about autumn colors

by quoting a few lines written by one of Father's sisters, who died many years ago, and whom we never saw. They were written one October morning upon one of those maple-trees which stretched over the gateway of the old New England home : —

“Last eve that tree in greenness stood before us,
And every leaf in vivid verdure shone;
But when the night a mantle dark threw o'er us,
Autumn's bright pencil put fresh colors on:
And in the place of summer's simple green,
Red, yellow, orange, in bright glare are seen.
Thus Nature shows us that a simple dress
Is best becoming spring-time loveliness;
For not till hues of youth begin to fade
Are brighter colors on the foliage laid.”

OCTOBER 28.

And now a little more about those enchanting seaweeds, which come to our shores from distant lands, — from the glowing tropics with colors ripened in the sun, from the Gulf Stream, from Indian seas, from the Azores, and the “vexed Bermoothes,” from Iceland and the Faroe Isles, from the misty Orkneys and Hebrides, and

“Thy wild and stormy steep,
Elsinore.”

The botanical name of seaweeds is *Algæ*, and naturalists have endeavored to classify and arrange them, but the arrangement is yet quite imperfect. There is great variety of form, size, and structure. Some are mere minute particles, becoming visible to the naked eye only when collected in heaps; others are strong and branching plants; some grow on rocks in shallow water; some in the beds of the ocean, and becoming dislodged, rise in such formidable masses as to impede the course of ships. These plants are arranged by Professor Harvey into three sub-classes, called *Melanospermeæ*, *Rhodo-*

spermeæ, and *Chlorospermeæ*. The first are marine plants of an olive-green, or brown color; the second are also mostly marine plants of rosy red, or purple tints; the third are marine, and also fresh water plants of a green color. The plants of the second class are the beauties of the family, distinguished by leafy fronds and brilliant colors; they bring a thrill of delight to the sea-weed seeker on ocean beaches, and are extracted with the tenderest care, from sometimes the most disagreeable surroundings. Many of the sea-weeds are of the finest and most delicate texture; the base of the stem forms a dense, shield-like root, and the tops often expand into a broad, foliaceous crown. They adhere with great tenacity to the rocks on which they grow, resisting the sway of the uneasy element to which they are constantly exposed; their growth is very rapid, a few months covering large spaces with these marine forests. In the genus *Laminariaceæ*, the species *Esculenta* grows to the length of twenty feet, and forms a part of the simple food of the peasants of Iceland, Scotland, Denmark, and other northern countries. The *Saccharina*, or sugar-belt, is eaten by the Icelanders, and is considered a great luxury in Japan. The *Digitata* is cried around the streets of Edinburgh as "tangle." The well-known Carrigeen Moss (*Chondus-crispus*) belongs to the Algæ. The Dulse, when roasted, has the flavor of roasted oysters; and from the *Gelidium* comes the substance collected by swallows for constructing the famous "birds'-nests," which are considered such luxuries in China and Java.

Among the Algæ were first observed those functions, which had been supposed to belong only to animals. It was found that some of these plants had a distinct power of self-movement, so that this power would no

longer serve to distinguish between animal and vegetable organization. The globe-animalcule (*Volvox-globator*), which possesses the most active powers of motion, has been shown to be undoubtedly a plant, and many others of a similar structure have been transferred from the animal to the vegetable kingdom. The Smithsonian Institute has published a volume upon Algæ, or seaweeds, by which they may be studied and understood. It is by Professor Harvey, and is called, "Nereis-Boreali-Americana; or, History of the Marine Algæ of North America."

NOVEMBER 1.

While the beautiful summer lasted, we had troops and troops of floral friends. Their sunny faces greeted us in the grassy meadow, and they lured us on from lowland to highland, and confided to us, true lovers as they knew we were, their most secluded and hidden haunts. We knew well where to find the shy beauties who steal away from cultivated grounds, and open their glowing petals by the brink of mountain rills, or in the deep ravines and unfrequented forest paths. We sought on the remote and sheltered hill-sides the rare spring-orchis, the nodding trillium, and fragrant pyrola; and in the damp and secluded dells, the elegant purple oxalis, and adder's-tongue, and *Arethusa*, the white violets, and spring-beauties; and by the brooks, the *Sarracenia* and the cardinal flower; and far away in the deeper woods the showy ladies'-slipper and fringed orchis of the later summer. We learned where grew the freshest mosses and the fairest ferns, and every forest ramble was tinged and tinted with that *couleur de rose*, and that purple light of love bestowed upon us by these woodland pets. But these darlings have folded themselves away from



these sterner gales, and though we know that through the coming winter months, we shall find much without to give a charm to the frequent stroll, we have also arranged much within that will give satisfaction. Our house-plants are beautiful, and we mean to add to them every available treasure. We are going to try all sorts of experiments with hyacinth bulbs, particularly that one with the two hyacinth glasses, out of one end of which is to come a white, and out of the other, a purple hyacinth. We have placed a sweet potato in a suitable vase, and expect to see that sprout and throw out leaves, and finally run over into a graceful vine with pretty flowers. Then we have lovely mosses covering dishes of sand, in which we can place bulbs and greenhouse flowers; and one shallow dish of silver sand, in which are crocus bulbs placed an inch or two apart, will be delightful soon.

Then we have a "Plantation," a large, good-looking box, filled with the nicest earth, where we plant rare seeds, or slips, or anything with which we wish to experiment. All that survived of our Cuban plants were transferred to this box, and one of the beautiful flowering tamarinds is growing well. If it will but blossom, we shall be delighted, but if it will not, the leaves are as elegant as fern leaves. One little vine which grew from a seed from Colorado, has climbed to the top of one of the windows; it has prettily cut leaves of most delicate green, and a profusion of little white flowers growing in bunches, quite pretty, and as we do not know what it is, and as no one who has seen it can tell us, it is particularly interesting. And this reminds me of a rarity that we found in New England. While walking one day over a terraced hill, leading from the garden of a friend's

house, we found, growing in the grass, a plant about twelve inches high, and with flowers that we had never seen before, not remarkably pretty, but entirely new. We tried to find them out but could not, and all the botanical knowledge of the region could throw no light on these strange little blossoms. A botanical teacher in a literary establishment in the town, was as much in the dark as any of us. So we put a spray in a letter to



Father, who was in New York, and in due time he sent the somewhat imposing botanical description given him by a learned botanist:—“*Epimedium-Alpinum*. A native of the mountains of Southern Europe. Natural Order, Berberidaceæ. The nearest approach to *Epimedium-Alpinum* in this country is the *Vancouveria* of

Oregon and Washington territories." It seemed amazing to find growing wild on Massachusetts hills a flower whose home was on the mountains of Southern Europe, but the matter became easy enough to understand when we learned that, some years ago, a gentleman lived on this place, who made many experiments with flowers, and often received seeds from abroad, which he used to plant in localities where he thought they might make themselves at home.

NOVEMBER 3.

I must give you an additional dish of our favorite sea-weeds, for since I last wrote about them, I have had an opportunity to examine Professor Harvey's book upon American Algæ, and must tell you something more of this interesting family.

Among the Algæ are found the simplest forms of plant life; they are found not only in water but upon land, where there is continued moisture. Many are so minute as to be almost invisible, yet when examined by the microscope, these *nothings*, as one may call them, are found to be beautiful in form, and exquisitely adorned with ornament. They are found in hot and cold springs, with temperaments suited to the different temperatures and chemical combinations of the waters they inhabit; they exist on mountain peaks and the snows of Arctic regions, and upon Polar ice is found an unfrozen vegetation of minute Algæ, and not only in these localities, but, stranger still, in the *air*. A mysterious shower of atmospheric dust of exceeding fineness often covers the decks and rigging of ships far out at sea, and incredible as it seems, this impalpable dust, when examined microscopically, is found to be composed of minute species of Algæ.

Some naturalists suppose that this dust is lifted by the winds from the surfaces of pools, or the dried beds of shallow lakes, and thus borne to great distances, but another and later theory is that it is developed in the air itself, nourished by cloud-moisture, and carried over land and sea by these aerial voyagers.

But the Algæic forms with which we shall have most to do, are the beautiful structures which strew the sea-beaches, or grow in the little pools and hollows of those battered old rocks in which we so delight. On a small island near Newport, where we spent a perfect day, the mighty rocks were scooped out, forming deep pools over which the waves dashed at every high tide, leaving them at low tide filled with clear water, and thickly lined with the most beautiful specimens of small marine plants; not the sea-weeds for pressing, but thick, sturdy little plants, not half an inch high, so closely grouped that it looked like a velvet mosaic, and of such soft and brilliant colors that the eye was charmed to behold them. This island was a great rock with hardly any vegetation upon it, and but one house, which was a hotel, but it was a most wild and captivating place, and we longed to stay there a month. The waves dash all around this lonely rock in grand style, and the ocean roars with a heavy boom sounding like cannon. You can hardly hear any one speak, but no one wishes to hear any one speak, or we did not: we sat on the rocks for hours, watching the great waves thundering on the cliffs and seeing New York gentlemen catch fish, for it is a favorite summer resort and a great place for fishing. I stood a few minutes directly behind a Wall Street broker, and he caught three sharks while I was looking at him; he seemed very expert at the business of capturing these

frightful looking creatures with their terrific mouths. But I am wandering from sea-weeds. As a general thing, they do not derive their nourishment through their roots, or from the substances on which they grow, but from the water surrounding them; they will grow on rocks or shells, or the timbers of sunken ships, or upon metals or leather, or any substance beneath the waters which will afford them a foothold, and the firmly adhering root seems designed only to keep the plant fixed in its place. The root is ordinarily a simple disk, or expansion of the base of the stem, and when the plant is very large and requires more than one *holdfast*, other disks are formed, sometimes a circle of them around the central one. The only instances mentioned of penetrating roots are in those plants which grow either on sandy shores, or amongst coral formations, into which the roots penetrate and branch in all directions; but even in these cases, they seem to be not sent out in quest of nourishment, but to give greater support to the plants. Three colors are predominant in sea-weeds: grass-green, olive-green, and red; and in classifying them, much is trusted to color, though that is not an infallible guide. The Chlorosperms, or grass-green Algæ, are found chiefly in fresh water, or the shallower parts of the sea, exposed to full sunshine but always covered with water; while the Melanosperms, or olive-greens, are found where the ebbing and flowing tide alternately covers them with water, and leaves them exposed to the air. The Rhodosperms, or rose-red, are found in most vivid perfection in the deep and dark parts of the sea, shaded by projecting rocks or overgrowing sea-weeds. The beautiful iridescence of many of these sea-weeds when beneath the water, is charming to behold; in some species of *Cyste-*

seica, which when out of water is a dull olive-brown, the branches, as they sway to and fro under water, put on the richest and most vivid metallic blues and greens, changing with every movement. Similar tints are seen on the *Chondus-crispus* (Irish moss) when growing in deep water,—the tips of the branches glittering like sapphires and diamonds amidst dark purple leaves. The wonderful and beautiful red snow of the Polar regions, those “crimson cliffs” whose mysterious tintings have been noticed and wondered at by all the Arctic voyagers, are found to derive their brilliancy from most minute crimson plants of the Algæ family. These atoms of plants belong to the Order Palynellaceæ, the botanical name being *Protococcus-nivalis*. Every one of these little dots, as they seem, is a living plant of a carmine-red color, and flourishing in their snowy beds with a profusion that can hardly be imagined. Sir John Ross speaks of a range of cliffs in Baffin’s Bay, eight miles long, covered with deep snow, which wore a brilliant red color from these little plants, which not only covered the surface, but extended down through the snow, in many places twelve feet, to the rocks beneath; and Dr. Kane describes these cliffs as of a fine rose-red, and visible at a distance of ten miles.

From the floating dust of the aerial Algæ, and the minute beauty of the red snow-plant, let us glance at a few of the *immensities*. The *Necrosystis-Lutkeana* was discovered by Dr. Mertens on the northwest coast of America; when fully grown, the stem is more than three hundred feet long, bearing upon its upper end an immense air-vessel, six or seven feet long, and at the end of this grows a tuft of about fifty leaves, each leaf being from thirty to forty feet long. The sea-otters appro

priate these wonderful vehicles, reposing comfortably upon the air-pillows when wishing to make a journey of pleasure, and hiding in the thicket of leaves when on a fishing excursion. The *Macrosystis-pyrifera* is still more gigantic, the stems being estimated to be from seven hundred to a thousand feet long. Others have more breadth but less length, being marine trees growing with thick branches and broadly expanding top. Many are remarkable for size, or beauty of construction, or curious arrangement, and I could weary your patience with accounts of these water-plants.

But we shall know *a sight* about the preparations for pressing sea-weeds, which we should not have known without Professor Harvey's hints. They should be rinsed in fresh water in the first place, to clear them from sand and impurities, then placed in shallow dishes of water to give them room to float and expand. A piece of white paper of the proper size is then slipped under the floating specimen, and it is lifted carefully out upon it. If any of the fine fibres are entangled or matted, a little water dropped upon them will detach them, and with a pointed instrument, a large pin or needle, the delicate branches can be properly arranged upon the paper. The white papers with the specimens upon them, should be laid on a sheet of blotting paper, and covered with soft muslin, placing the muslin directly upon the sea-weeds. Another sheet of blotting paper with specimens similarly arranged, may be laid upon this, and so on as many as you choose. The parcel must then be placed between flat boards, and subjected to a moderate pressure; they should be examined after several hours, and dry coverings and papers should be placed upon very large specimens.

In fine weather many of the delicate ones will be perfectly dry in forty-eight hours. Care must be taken in the use of fresh water, and the sea-weed presser must notice the effect of this; to some of the sea-weeds it is a strong poison, rapidly decomposing the delicate tissues, but when applied to others, it increases the brilliancy of coloring. The reds are generally rendered brighter and more clear. Some dull browns come out a brilliant crimson. The tendency of some sea-weeds to become brown or black in drying, may often be lessened by steeping them in fresh water for an hour or two before drying. Hot water changes the color of all Algæ to green, and if heat be applied during the drying process, an artificial green may be imparted to the specimens, — a mode of preparation, as Professor Harvey justly remarks, which could never be resorted to by botanical collectors, although it may be excused in the mere makers of sea-weed pictures; and though it is very evident that these mere makers of sea-weed pictures must rank lower in the intellectual scale than the botanical collectors, I see that we shall be of the number, for I know that we shall improve the first opportunity to make our sea-weeds as bright a red as fresh water steeping can give them, and as vivid a green as hot water can bestow.

NOVEMBER 7.

I am glad that you are so much interested in ferns and mosses, as to wish to know all that we know about them. We delight in ferns, and intend to study them faithfully. They have the enduring faithfulness of the sombre evergreen family, with the light, feathery droop of their own graceful organization. We learned to love the ferns when we first came here; they welcomed us to

our winter home with the unexpected tint of vernal months; their elegant, plummy foliage clothed the sheltered banks, which slope to the mountain streams, with a carpet of living verdure all winter. They extend also to the mountain tops, and some which grow high up amidst the broken rocks have a delicate beauty which looks ill-adapted to battling with the winter storms, and makes you hate to leave them in their chosen abodes; you feel as if they would be more comfortable in the softly pulverized soil of the garden bed, and we were tempted to transplant quantities to what we deemed a more genial home, only to see them wither away. Some writer says that "ferns seem made to show the *perfection of a leaf*," and certainly nothing can be more beautiful than these, so delicately cut and veined, so faultlessly graceful. I used to think ferns were only leaves with no flowering properties, and it is true that the flowering is inconspicuous; still it exists, and upon the under side is the simple inflorescence, consisting of little dots arranged generally in the middle of the leaves, sometimes upon the edges. Ferns belong to Class Third (*Acrogens*), and to Order 136 (*Filices*). They are very difficult to examine, and we have made out but few of them; we have found the ebony fern (*Asplenium-ebeneum*), a handsome species with polished black stem and delicate foliage; also the cinnamon fern (*Osmunda-cinnamomea*), the stems clothed with a soft, cinnamon-colored wool, with which the humming-birds line their little nests. We have found also the pretty rock-fern (*Allosurus-gracilis*), a delicate species growing in the crevices of rocks; but the loveliest of all is the maiden-hair (*Adiantum-pedatum*), not like the tropical maiden-hair which adorns our fernery, but almost as beautiful.



Lygodium-palmatum.

It grows in damp, rocky woods, and the stem, after rising ten or twelve inches, throws off delicate, glittering, bluish-black stems in a horizontal direction, and upon these are strung the beautiful light green leaflets, forming a crescent-shaped top. We have searched in vain for the climbing-fern (*Lygodium-palmatum*), which we think ought to be found here, and which we hope yet to find. This is the most elegant of ferns, if we may judge from a pressed branch given us by a friend, and is the only climbing fern found in the United States. The walking-fern (*Camptosorus-rhizophyllus*) is interesting from its peculiar habit of growing. The frond or leaf-stalk grows six or eight inches long, the slender, linear point bending down till it reaches the ground, where it takes root, another plant springing up at this point to *walk along* in the same manner. The one which we brought home from New England is already on its travels, a new plant growing at the point of the leaf. We have also found the least-fern, as it is called (*Schizæa-pusilla*), the very smallest of ferns and quite different from others, the leaf-fronds being mere lines, and the plant only three or four inches high. Ferns are interesting, because belonging to the oldest as well as the newest of times. Geologists say that the world, so far as it is known, never possessed a flora that was destitute of ferns and pines, and they have a double and somewhat contradictory claim upon our regard; respect for their venerable age, and admiration of the immortal youth and perpetual freshness which is their fair inheritance. There are found impressions of ferns dating far back into the old chaotic days, "before the world was ready for the child of civilization," and from these we learn that in those times many of the ferns and mosses

were of the size of forest trees. Impressions of ferns are continually found upon stones of different kinds, both in other countries and in this. We were once staying in the vicinity of Boston, and a railroad was in process of construction. A quantity of round, dingy, uninteresting-looking stones were thrown up from the depths, and deposited upon the road side; by accident one of these was split asunder, and inside the color of the stone was the most delicate and beautiful pinkish salmon tint, and upon this charming background were distinctly traced the impressions of feathery ferns in the blackest jet color. Many others were afterwards broken, presenting the same appearance.

The most wonderful discoveries, however, of fossil ferns, have been made in the "coal measures," as they are called, which are strata of coal with attendant rocks; within these are found the true enchanted forests, stranger in their luxuriance than poet ever framed; they reveal dense and sombre forests where ferns and mosses were of gigantic size, and they show many species which are now unknown. From fossil ferns we will glance at fossil pines, as they are generally found in close proximity. From these fossil pines comes the beautiful amber, the origin of which was so long a mystery. It is found to be the fossilized resin of the *Pinus-succinifer*, or amber pine. Some of these fossil pines are found in Scotland, but the greatest quantity are in the vicinity of the Baltic Sea, and these "buried treasures of the pirate Time" are thrown upon the shores after storms have disturbed the seas.

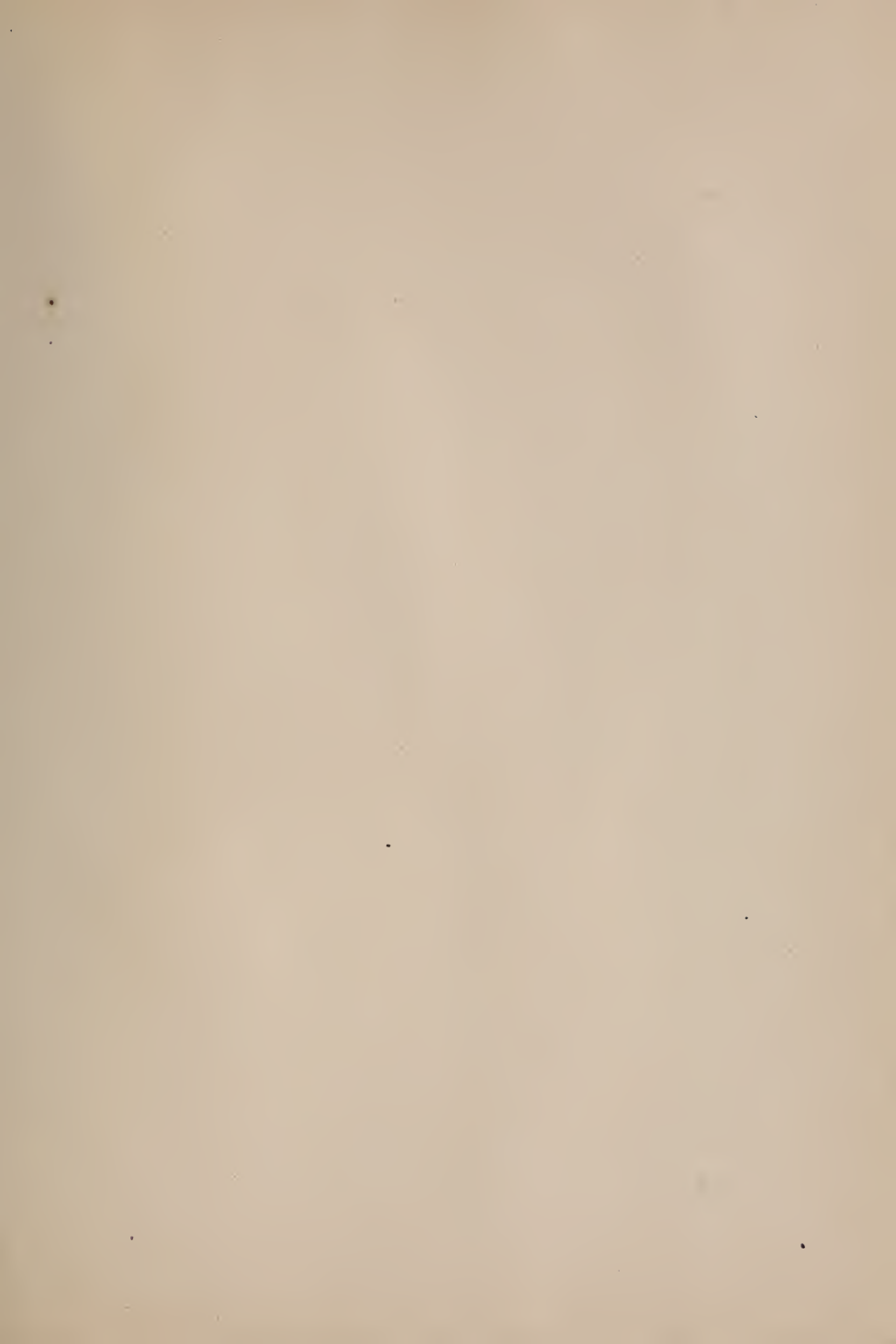
NOVEMBER 10.

We thought summer was over and gone, to be sure, and November is not generally looked upon as a summer

month, but just now it deserves the name. For a week or more, it has been dismal enough, nothing to tempt one out, everything indeed to forbid it; a dull, dreary, chilly drizzle, the "cold November rain," and these saddest days when summer lies dead, and the earth is covered with sackcloth, and the skies weep inconsolably. But suddenly from out this hopeless chill, this universal mourning, has come that most delicious season of warmth, and brightness, and dreamy softness,—the Indian summer! Who can portray its charm? this golden atmosphere like delicate smoke, only no smokiness of odor mingles with the faint blue film that is over everything, a mantle of graceful haze resting on hill and valley, floating over meadow and river, obscuring nothing, but softening and glorifying everything that it touches. The still woods are all filled with this tender summer glow, and you feel as if the flowers must be waiting for you in the soft, sunny nooks. The sun grows wondrously large and red, and like a mighty ball of fire, looks through this delectable haze with a brightness that is unclouded, but which, in some mysterious manner, is so divested of its fierceness, that you can gaze upon its gradual westering way with eyes unpained. It is hard to believe that these beautiful, dreamy days, are set directly upon the brow of winter, and one does not wonder that some of the summer flies and insects are deluded from their hiding places, and come forth to gaze upon that "face of nature," which they had supposed was muffled, and veiled, and inexorably hidden for months to come. Truly a mysterious, lovely episode is this Indian summer. Can it be that a year nearly has passed since we came here? It is even so, and the seasons as they came, brought their own enjoyments.

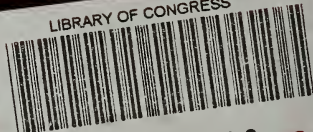
It is true that we are sorry that the glowing summer, and the ripe, rich autumn have departed, and gladly would we keep with us the soft touch of Indian summer; but we do not dread the coming winter; in this favored clime it wears no "face of horror." The woods have balmy breathings all through the dreary months, and we are glad that we tried the winter first in our country home, because we know how thoroughly we enjoyed it, and how much it has to offer us; and we expect to improve greatly upon the last winter's experiences, as we were then such novices that much escaped us which will be pressed into our service now. And when the spring shall come in "her own sweet time to waken bud and flower," we hope that you will be with us to share our forest rambles, and to become familiar with all that has so endeared to us this charming spot on the slope of these secluded hills.







LIBRARY OF CONGRESS



0 005 345 529 3

